APPENDIX F

SUPPORTING INFORMATION FOR TRANSPORTATION INFRASTRUCTURE

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Calculation Package Cover Sheet

Name of Assembler: M. Smith

Date: January 20, 2005

Program/Project Designator: Military Family Housing DCR & L Program, Eglin AFB/ Hurlburt Field, FL
F41624-03-D-8614-0043 DO-43-EIS

Calculation Description: Transportation study – DO-43-EIS

References:

1) Highway Capacity Manual and HCM2000 software, Transportation Research Board
2) A Policy on Geometric Design of Highways and Streets 200, AASHTO
3) Traffic and Highway Engineering 2nd Edition, Nicholas Garber and Lester Hoel
4) Traffic Engineering, 2nd Edition, William McShane, Roger Roess, Elena Prassas
5) Trip Generation, 6th Edition, Institute of Transportation Engineers
6) 2002 Florida Traffic Information FTI2002, Florida Department of Transportation

Assumptions:

- The project would be completed in 2014 and that analyses of traffic impacts would be conducted for 2014 and five years later in 2019
- Projected traffic on affected roadways would continue to grow at the same annual percentage rate as historically used in Florida DOT projections.
- Traffic analyses would be preformed on peak hour traffic flows for the expected PM peak traffic hours.
- Trip generation for each housing development area would be determined by use of ITE Trip Generation methods, but that the number of trips would be modified by assumptions on the expected direction of trips from the Military Installations.

Report Organization:

- Two page text summary of methods
- Exhibit A – Peak Hour trip generation by alternative, and copies of relevant portions of Trip generation.
- Exhibit B – Base Trip Generation Spreadsheets and backup and copies of base traffic count information from FL DOT.
- Exhibit C – Base Trip Generation Spreadsheets and HCM2000 modeling output.

Calculation By	Date	Checked By	Date
Michael J Smith Michael J Smith	1/20/05	Gary M. Nudzynski	1/20/05

Key Words: Traffic Study, HCM

Military Family Housing DCR & L Program, Eglin AFB/ Hurlburt Field, FL

CALCULATION PACKAGE
FOR TRAFFIC STUDY

Project Description:

Approximately 2,690 units of existing military housing will be demolished and approximately 2,015 new housing units will be constructed associated with Eglin AFB and Hurlbert Field. Six possible alternative locations for the construction of the new housing units are being considered. Each alterative consists of new construction at one or more of the three proposed expansion sites:

1) The Poquito Bayou Expansion Area
2) The Eglin Main Base area including Capehart/Wherry Expansion Site and the Old Plew/New Plew Expansion Site.
3) The Camp Pinchot Expansion Site

In addition, there is proposed construction at the Soundside Manor location that is common to all alternatives. For each of the alternatives three possible densities of housing units were considered. The densities considered were three units per acre, four units per acre and six units per acre. Each density would have a different distribution of new housing units and a different expected effect on traffic.

The purpose of this traffic study is to determine the affect of the proposed development alternatives on the nearby roadways.

This traffic study follows the main steps listed below:

Step 1) Determine the expected base Peak Hour trips generated by each proposed development.

Using the methods contained in Trip Generation 6th Edition (reference # 4) the expected design peak hour trips were calculated for the peak PM weekday hour, the peak hour on a Saturday and the peak hour on a Sunday. After examining the results of this calculation, the peak PM weekday hour was selected as the most critical time. The expected trip generation is shown in the attached spreadsheets titled "Trip Generation Calculations, Military Housing Eglin AFB and Hurlbert Field" contained in Exhibit A. Exhibit A also contains copies of selected pages from reference # 4. Trip Generation 7th Edition is now available and was checked to determine if there were significant differences from Trip Generation 6th Edition. There were no significant changes noted from the 6th edition and the earlier calculation methods have been retained.

Step 2) Determine the existing traffic on the key roadway segments that will be affected by the proposed development. The source of this traffic information was 2002 Florida Traffic Information FTI2002 (reference # 5) published by the Florida Department of Transportation. This information is based on traffic count information from 2002 and is contained in Exhibit B.

Step 3) Project the growth of the 2002 traffic information from 2002 until the project completion year of 2014 (the horizon year) and 2019 (2019 is five years after the horizon year). This was done by using the projected growth contained in the 2002 Florida Traffic Information FTI2002 (reference # 5) where possible. If the 2002 Florida Traffic Information FTI2002 (reference # 5) did not contain projections for far enough into the future, growth was projected assuming the same percentage annual growth shown in reference # 5 continues into the future. Future traffic projections were developed for each Alternative in the Excel Spreadsheets contained in Exhibit C. The expected peak trips generated in Step one was then broken down into trip direction, based on additional information on the expected population of that area and the existing traffic pattern. The expected trips associated with the new development was added to the projected traffic on each roadway.

Some alternatives contain differing assumptions for the affected roads for the alternative, these assumptions were labeled scenarios. For example Alternative One, the construction of new units at the Poquito Bayou Expansion Area, has been analyzed for three densities for each of the three proposed traffic patterns. One scenario is assuming that all traffic would access the site from SR 189, a second scenario is assuming that all traffic would access the site from SR 85, and a third scenario is assuming that the traffic would be split between SR 85 and SR 189.

Step 4) Using the expected trip information from Step 3, the Level of Service (LOS) for the impacted roadways were modeled using the methods and software of the Highway Capacity Manual 2000 of the Transportation Research Board to determine the expected LOS on the roadway in 2014 and 2019 for both the Build and the No Build options. Selected summary outputs for each of these models are included in Exhibit C. Each model contains many factors, such as the Peak Hour Factor and % trucks, which were determined or calculated from the information provided in reference # 5. These calculations are not included in the package, but the results and other assumptions used are documented in the summary printouts included in Exhibit C.

Step 5) The results of this calculation package are summarized and discussed in the Transportation section of the Environmental Consequences of the EIS.

EXHIBIT A

TRIP GERERATION PER ITE METHODS

Trip Generation Calculations Eglin AFB — Military Housing Eglin AFB and Hurlbert Field

Peak Hour trip generation - Weekday one hour between 4 and 6 PM					
64% entering, 36% exiting				Design Peak Hour	
Ln(T)=0.901 Ln(X) + 0.527 - where T = # of trips and X = # of units.	X		Y	A	B
	# of Units	Ln(T) =	T=	Entering	Exiting
SPREADSHEET FORMULAS		**0.901*LN(X)+0.527**	**2.71828^C7**	**.64*Y**	**.36*Y**
Alternative 1					
Poquito Bayou Expansion Alternative					
3 units per acre	1775	7.2679	1434	**917**	**516**
4 units per acre	1745	7.2525	1412	**903**	**508**
6 units per acre	1685	7.2210	1368	**875**	**492**
Alternative 2					
Eglin Main Base Alternative					
ASSUME that Hurlbert needs 315 units, and Soundside Manor units will be primary and others will be at Eglin.					
Add Eglin to Hurlbert trips and the net reduction in units on Eglin Main Base will be ignored.					
Hurlbert units on Eglin -					
3 units per acre	225	5.4069	223	**143**	**80**
4 units per acre	195	5.2780	196	**125**	**71**
6 units per acre	135	4.9467	141	**90**	**51**
Alternative 3 and 4					
Camp Pinchot and Poquito Bayou					
Camp Pinchot					
3 units per acre	660	6.3765	588	**376**	**212**
4 units per acre	880	6.6357	762	**488**	**274**
6 units per acre	1320	7.0010	1098	**703**	**395**
Poquito Bayou					
3 units per acre	1115	6.8490	943	**603**	**339**
4 units per acre	865	6.6202	750	**480**	**270**
6 units per acre	365	5.8428	345	**221**	**124**
Alternative 5 and 6					
Camp Pinchot and Eglin Main Base alternative					
Camp Pinchot					
3 units per acre	660	6.3765	588	**376**	**212**
4 units per acre	880	6.6357	762	**488**	**274**
6 units per acre	1320	7.0010	1098	**703**	**395**
Eglin Main Base					
3 units per acre	1265	N/A*			
4 units per acre	1015	N/A*			
6 units per acre	515	N/A*			
Soundside Manor					
3 units per acre	30	3.5915	36	**23**	**13**
4 units per acre	60	4.2160	68	**43**	**24**
6 units per acre	120	4.8405	127	**81**	**46**
315 units	315	5.7101	302	**193**	**109**
Offseting Demolition					
Soundside Manor	60	4.2160	68	**43**	**24**
Pine Shadows	206	5.3274	206	**132**	**74**
Live Oak Terrace	100	4.6763	107	**69**	**39**
Camp Pinochot	4	1.7761	6	**4**	**2**
Poquito Bayou Housing	150	5.0416	155	**99**	**56**
Capehart Housing	498	6.1228	456	**292**	**164**
Wherry Housing	625	6.3274	560	**358**	**201**
Ben's Lake Housing	236	5.4499	233	**149**	**84**
Camp Rudder	25	3.4272	31	**20**	**11**
Old Plew	390	5.9025	366	**234**	**132**
New Plew	300	5.6661	289	**185**	**104**

* There is an overall reduction in units at Eglin Main Base. There would be no expected increase in Trip Generation from the Main Base

TRIP GERERATION PER ITE METHODS

Military Housing Eglin AFB and Hurlbert Field

Peak Hour trip generation Peak Hour on a Sunday
53% entering, 47% exiting
T=0.756 * (X) +23.815 - where T = # of trips and X = # of units.

	# of Units	T=	Entering	Exiting
SPREADSHEET FORMULAS	**X**	**0.756*(X)+23.815**	**.53*Y**	**.47*Y**
Alternative 1				
Poquito Bayou Expansion Alternative				
3 units per acre	1775	1366	**724**	**642**
4 units per acre	1745	1343	**712**	**631**
6 units per acre	1685	1298	**688**	**610**
Alternative 2				
Eglin Main Base Alternative				
3 units per acre	1925	1479	**784**	**695**
4 units per acre	1895	1456	**772**	**685**
6 units per acre	1835	1411	**748**	**663**
Alternative 3 and 4				
Camp Pinchot and Poquito Bayou				
Camp Pinchot				
3 units per acre	660	523	**277**	**246**
4 units per acre	880	689	**365**	**324**
6 units per acre	1320	1022	**542**	**480**
Poquito Bayou				
3 units per acre	1265	980	**519**	**461**
4 units per acre	1015	791	**419**	**372**
6 units per acre	515	413	**219**	**194**
Alternative 5 and 6				
Camp Pinchot				
3 units per acre	660	523	**277**	**246**
4 units per acre	880	689	**365**	**324**
6 units per acre	1320	1022	**542**	**480**
Eglin Main Base				
3 units per acre	1265	N/A*		
4 units per acre	1015	N/A*		
6 units per acre	515	N/A*		
Soundside Manor				
3 units per acre	30	46	**25**	**22**
4 units per acre	60	69	**37**	**33**
6 units per acre	120	115	**61**	**54**
315 units	315	262	**139**	**123**
Offseting Demolition				
Soundside Manor	60	69	**37**	**33**
Pine Shadows	206	180	**95**	**84**
Live Oak Terrace	100	99	**53**	**47**
Camp Pinochot	4	27	**14**	**13**
Poquito Bayou Housing	150	137	**73**	**64**
Capehart Housing	498	400	**212**	**188**
Wherry Housing	625	496	**263**	**233**
Ben's Lake Housing	236	202	**107**	**95**
Camp Rudder	25	43	**23**	**20**
Old Plew	390	319	**169**	**150**
New Plew	300	251	**133**	**118**

TRIP GERERATION PER ITE METHODS

Military Housing Eglin AFB and Hurlbert Field

Peak Hour trip generation Peak Hour on a Saturday
54% entering, 46% exiting
T=0.886*(X) +11.065 - where T = # of trips and X = # of units.

	# of Units	T=	Entering	Exiting
SPREADSHEET FORMULAS	**X**	**0.886*(X)+11.065**	**.54*Y**	**.46*Y**
Alternative 1				
Poquito Bayou Expansion Alternative				
3 units per acre	1775	1584	**855**	**729**
4 units per acre	1745	1557	**841**	**716**
6 units per acre	1685	1504	**812**	**692**
Alternative 2				
Eglin Main Base Alternative				
3 units per acre	1925	1717	**927**	**790**
4 units per acre	1895	1690	**913**	**777**
6 units per acre	1835	1637	**884**	**753**
Alternative 3 and 4				
Camp Pinchot and Poquito Bayou				
Camp Pinchot				
3 units per acre	660	596	**322**	**274**
4 units per acre	880	791	**427**	**364**
6 units per acre	1320	1181	**638**	**543**
Poquito Bayou				
3 units per acre	1265	1132	**611**	**521**
4 units per acre	1015	910	**492**	**419**
6 units per acre	515	467	**252**	**215**
Alternative 5 and 6				
Camp Pinchot and Eglin Main Base				
3 units per acre	660	596	**322**	**274**
4 units per acre	880	791	**427**	**364**
6 units per acre	1320	1181	**638**	**543**
3 units per acre	-784	N/A*		
4 units per acre	-1034	N/A*		
6 units per acre	-1534	N/A*		
All Alternatives				
Soundside Manor				
3 units per acre	30	38	**20**	**17**
4 units per acre	60	64	**35**	**30**
6 units per acre	120	117	**63**	**54**
315 units	315	290	**157**	**133**
Offseting Demolition				
Soundside Manor	60	64	**35**	**30**
Pine Shadows	206	194	**105**	**89**
Live Oak Terrace	100	100	**54**	**46**
Camp Pinochot	4	15	**8**	**7**
Poquito Bayou Housing	150	144	**78**	**66**
Capehart Housing	498	452	**244**	**208**
Wherry Housing	625	565	**305**	**260**
Ben's Lake Housing	236	220	**119**	**101**
Camp Rudder	25	33	**18**	**15**
Old Plew	390	357	**193**	**164**
New Plew	300	277	**150**	**127**

Land Use: 210
Single-Family Detached Housing

Description

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

Additional Data

The peak hour of the generator typically coincides with the peak hour of the adjacent street traffic.

The sites were surveyed from the late 1960s to the mid-1990s throughout the United States and Canada.

The number of vehicles and the number of residents have a high correlation with average weekday vehicle trip ends. The use of these variables is limited, however, because the number of vehicles and residents is often difficult to obtain or predict. The number of dwelling units is generally used as the independent variable of choice because it is usually readily available, easy to project, and has a high correlation with average weekday vehicle trip ends.

This land use includes data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there is a wide variation in trips generated within this category. As expected, dwelling units that were larger in size, more expensive, or farther away from the central business district (CBD) had a higher rate of trip generation per unit than those smaller in size, less expensive, or closer to the CBD. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units have the highest trip generation rate per dwelling unit of all residential uses, because they are the largest units in size and have more residents and more vehicles per unit than other residential land uses; they are generally located farther away from shopping centers, employment areas, and other trip attractors than are other residential land uses; and they generally have fewer alternate modes of transportation available, because they are typically not as concentrated as other residential land uses.

Source Numbers

1, 4, 5, 6, 7, 8, 11, 12, 13, 14, 16, 19, 20, 21, 26, 34, 35, 36, 38, 40, 71, 72, 84, 91, 98, 100, 105, 108, 110, 114, 117, 119, 157, 167, 177, 187, 192, 207, 211, 246, 275, 283, 293, 300, 319, 320, 357, 384, 435

Single-Family Detached Housing
(210)

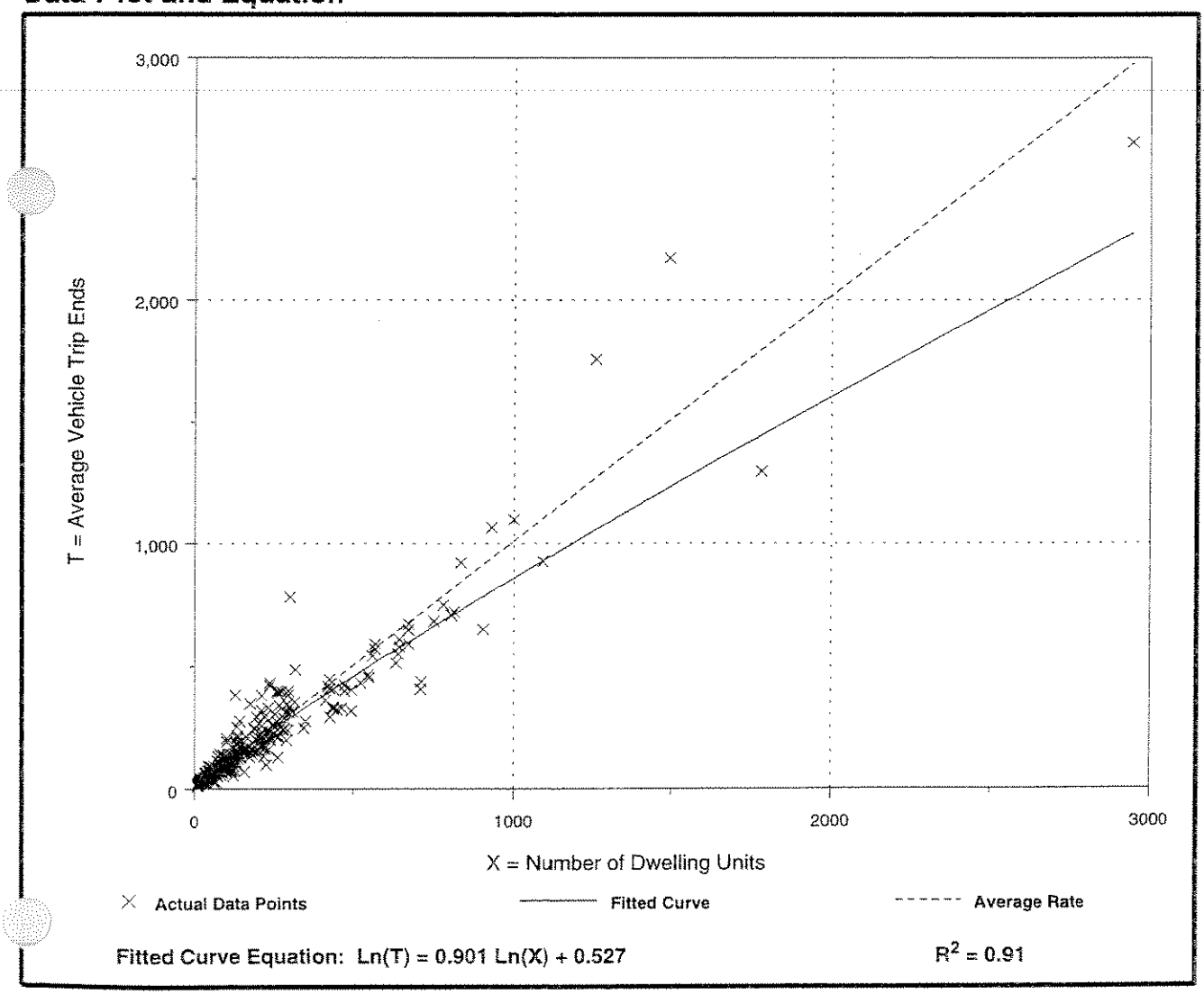
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 294
Avg. Number of Dwelling Units: 216
Directional Distribution: 64% entering, 36% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.01	0.42 - 2.98	1.05

Data Plot and Equation



Fitted Curve Equation: $Ln(T) = 0.901\ Ln(X) + 0.527$

$R^2 = 0.91$

Single-Family Detached Housing
(210)

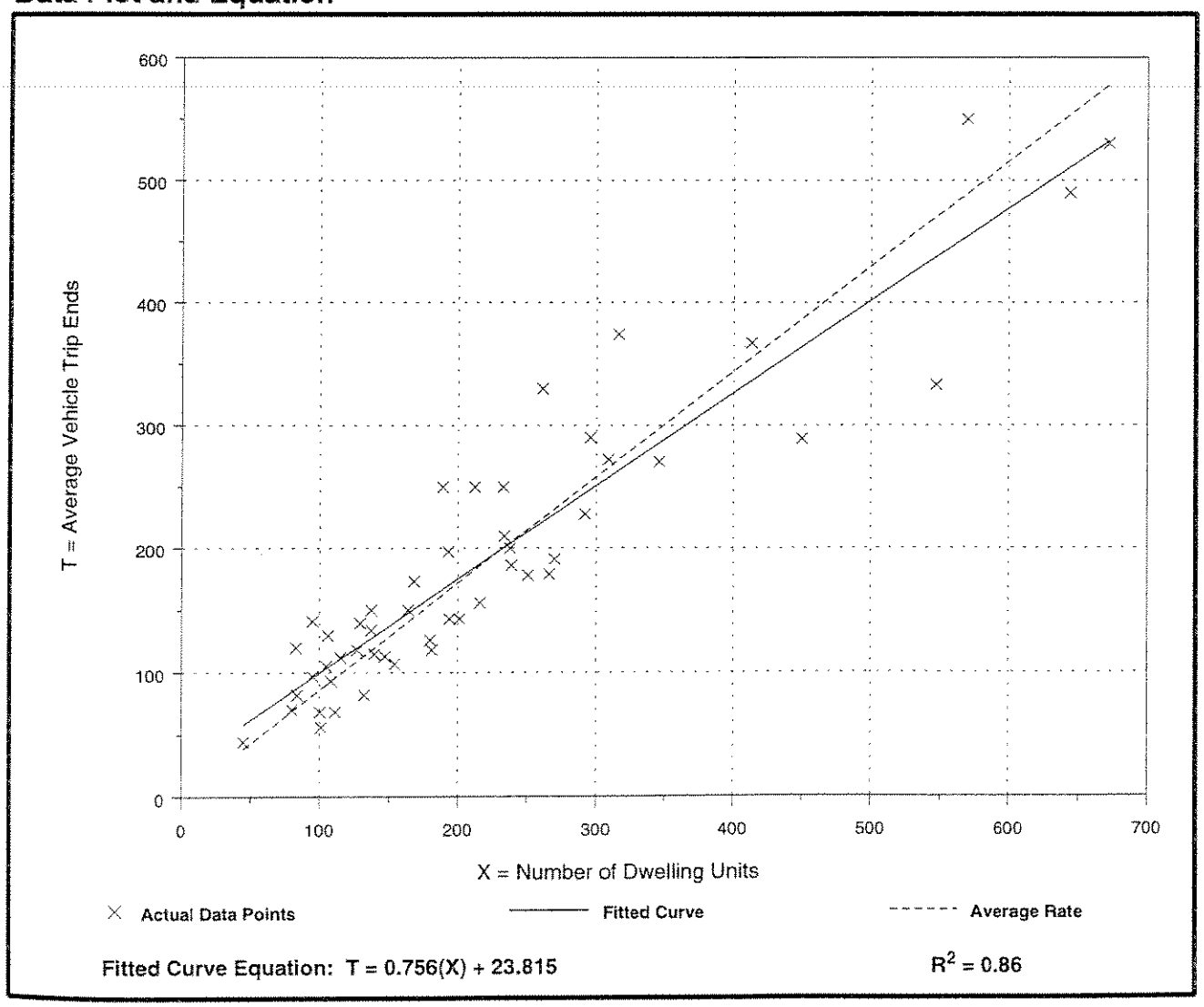
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Sunday,**
Peak Hour of Generator

Number of Studies: 50
Avg. Number of Dwelling Units: 221
Directional Distribution: 53% entering, 47% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.86	0.55 - 1.48	0.95

Data Plot and Equation



Fitted Curve Equation: T = 0.756(X) + 23.815

R^2 = 0.86

EXHIBIT A

Single-Family Detached Housing
(210)

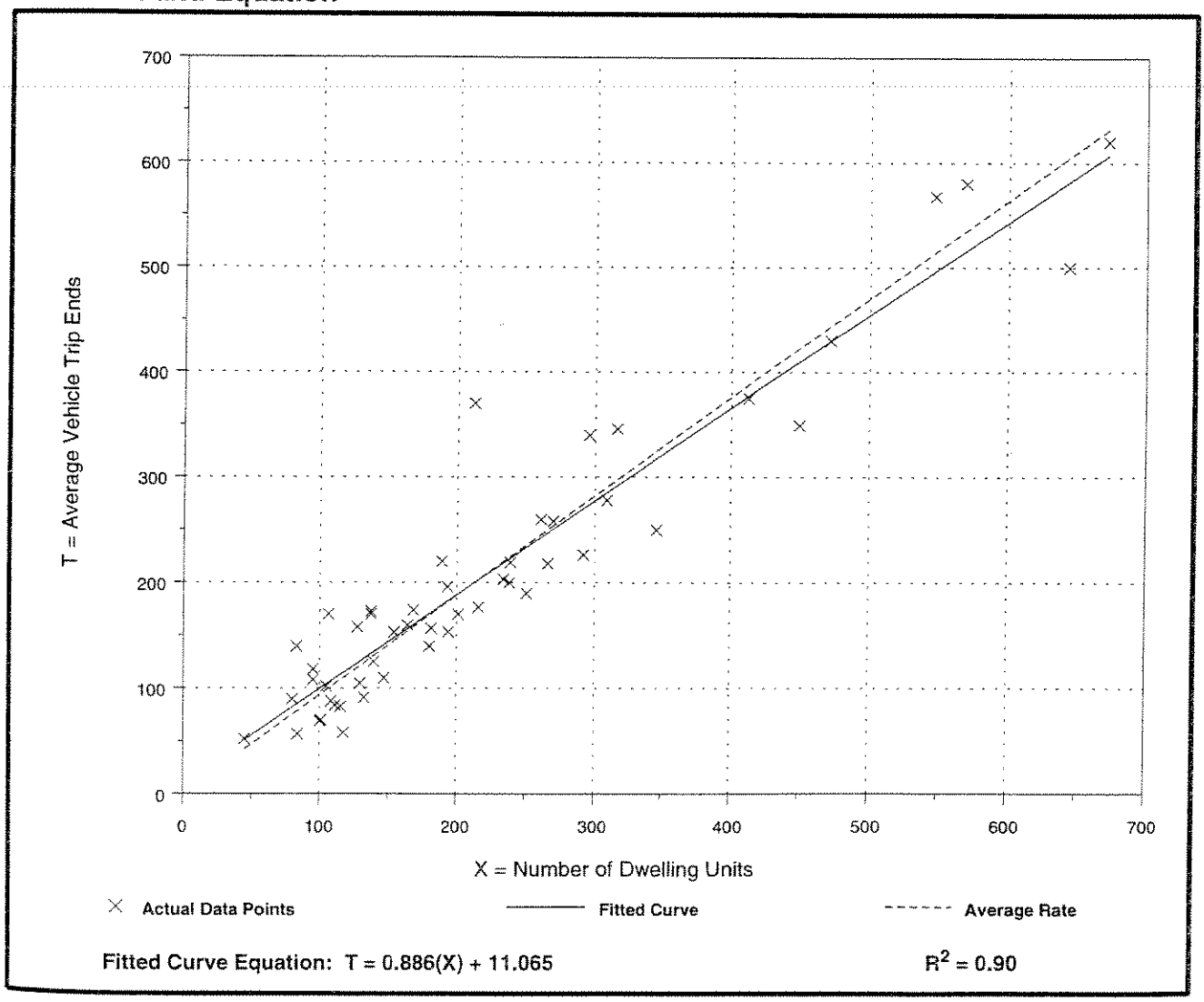
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday,**
Peak Hour of Generator

Number of Studies: 51
Avg. Number of Dwelling Units: 224
Directional Distribution: 54% entering, 46% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.50 - 1.75	0.99

Data Plot and Equation



Fitted Curve Equation: T = 0.886(X) + 11.065

R^2 = 0.90

EXHIBIT B

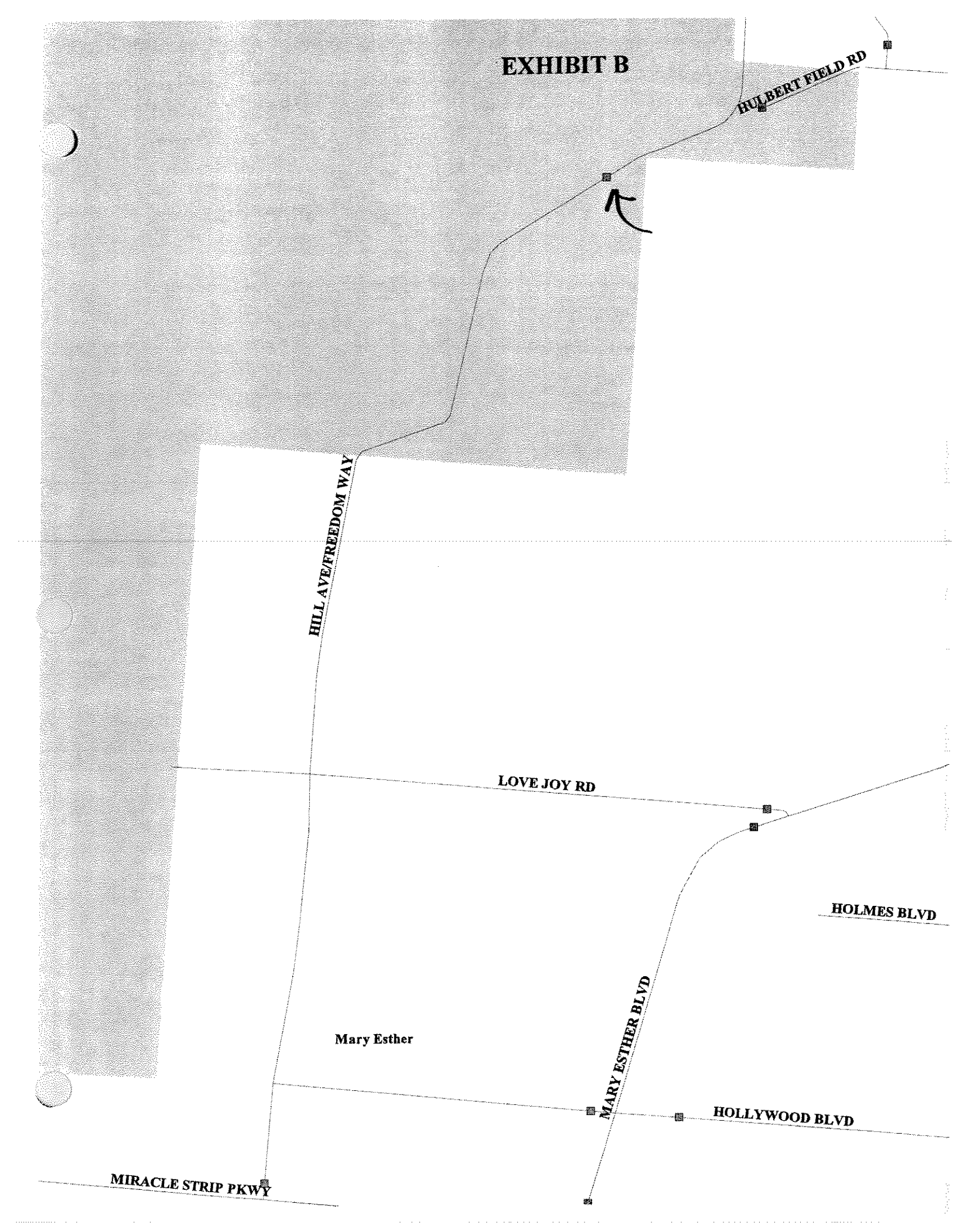
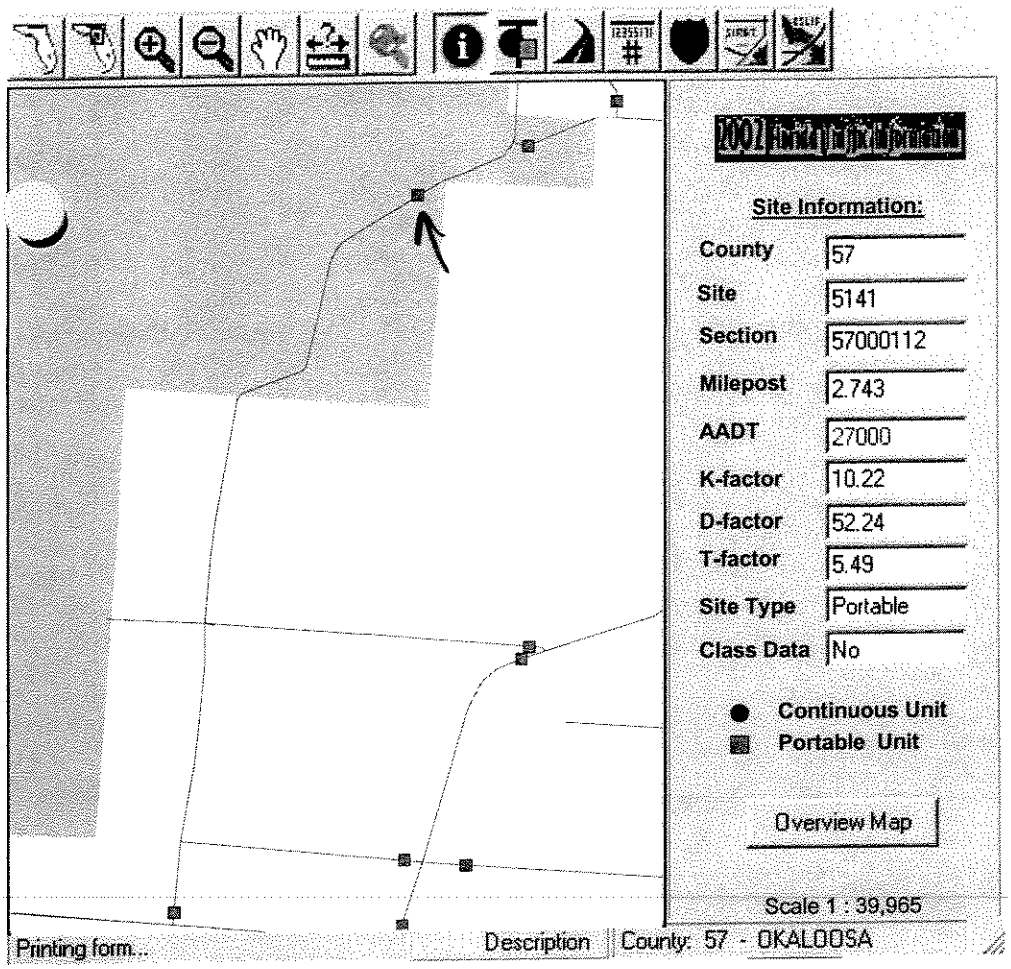


EXHIBIT B
HULBERT FIELD RD
HILL AVE/FREEDOM WAY
LOVE JOY RD
HOLMES BLVD
MARY ESTHER BLVD
Mary Esther
HOLLYWOOD BLVD
MIRACLE STRIP PKWY

EXHIBIT B


Site Information:
County 57
Site 5141
Section 57000112
Milepost 2.743
AADT 27000
K-factor 10.22
D-factor 52.24
T-factor 5.49
Site Type Portable
Class Data No
Continuous Unit
Portable Unit
Overview Map
Scale 1 : 39,965
Printing form...
Description
County: 57 - OKALOOSA

Print Date: Apr[illegible]2004

Florida D[illegible]tment of Transportation
Trans[illegible]tion Statistics Office

Annual Average Daily Traffic Report

County 57 -- OKALOOSA
:

Site SITE	Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
5141	P	MARTIN L. KING BLVD. .1 MI. SW OF HULBERT FIELD RD	14,000 N	13,000.00 S	27,000.00 C	10.22 F	52.24 F	5.49 F

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

575141-20020709.SYN

County: 57
Station: 5141
Desciption: MARTIN LUTHER KING BLVD. .1 MI. SW OF HULBERT FIEL
Start Date: 07/09/2002
Start Time: 1300

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	37.0	24.0	19.0	27.0	107.0	26.0	28.0	22.0	13.0	89.0	196.0
0100	24.0	17.0	8.0	17.0	66.0	9.0	12.0	9.0	15.0	45.0	111.0
0200	8.0	11.0	12.0	6.0	37.0	5.0	5.0	14.0	6.0	30.0	67.0
0300	7.0	14.0	9.0	8.0	38.0	5.0	9.0	13.0	9.0	36.0	74.0
0400	19.0	23.0	22.0	29.0	93.0	17.0	16.0	30.0	43.0	106.0	199.0
0500	27.0	46.0	59.0	123.0	255.0	37.0	50.0	89.0	182.0	358.0	613.0
0600	146.0	198.0	224.0	202.0	770.0	255.0	264.0	271.0	286.0	1076.0	1846.0
0700	242.0	246.0	257.0	251.0	996.0	284.0	291.0	287.0	262.0	1124.0	2120.0
0800	238.0	199.0	175.0	165.0	777.0	193.0	190.0	157.0	183.0	723.0	1500.0
0900	147.0	168.0	170.0	184.0	669.0	147.0	130.0	164.0	155.0	596.0	1265.0
1000	155.0	142.0	153.0	177.0	627.0	141.0	158.0	149.0	149.0	597.0	1224.0
1100	235.0	191.0	228.0	184.0	838.0	177.0	205.0	192.0	225.0	799.0	1637.0
1200	195.0	194.0	215.0	192.0	796.0	181.0	187.0	228.0	200.0	796.0	1592.0
1300	140.0	223.0	203.0	214.0	780.0	162.0	215.0	182.0	193.0	752.0	1532.0
1400	202.0	199.0	208.0	211.0	820.0	200.0	194.0	184.0	195.0	773.0	1593.0
1500	260.0	251.0	350.0	360.0	1221.0	184.0	242.0	216.0	275.0	917.0	2138.0
1600	348.0	367.0	355.0	395.0	1465.0	240.0	262.0	281.0	296.0	1079.0	2544.0
1700	396.0	357.0	310.0	251.0	1314.0	292.0	293.0	263.0	228.0	1076.0	2390.0
1800	273.0	229.0	183.0	167.0	852.0	183.0	186.0	160.0	141.0	670.0	1522.0
1900	150.0	162.0	145.0	130.0	587.0	139.0	141.0	150.0	141.0	571.0	1158.0
2000	143.0	105.0	102.0	91.0	441.0	111.0	107.0	97.0	101.0	416.0	857.0
2100	105.0	100.0	93.0	82.0	380.0	90.0	102.0	81.0	99.0	372.0	752.0
2200	65.0	53.0	49.0	58.0	225.0	66.0	89.0	49.0	41.0	245.0	470.0
2300	76.0	47.0	57.0	33.0	213.0	34.0	34.0	38.0	23.0	129.0	342.0
24-Hour Totals:					14367					13375	27742

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0700	996	0645	1148	0700	2120
P.M.	1615	1513	1630	1162	1630	2665
Daily	1615	1513	1630	1162	1630	2665

EXHIBIT B

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
3741	MARTIN L. KING BLVD. .1 MI. SW OF HULBERT FIELD RD	30,000	31,000	33,000	35,000	36,000	38,000	40,000	41,000		

4/5/2004

575141-20020709.SYN

County: 57
Station: 5141
Desciption: MARTIN LUTHER KING BLVD. .1 MI. SW OF HULBERT FIEL
Start Date: 07/09/2002
Start Time: 1300

Time	Direction: N 1st	2nd	3rd	4th	Total	Direction: S 1st	2nd	3rd	4th	Total	Combined Total
0000	37.0	24.0	19.0	27.0	107.0	26.0	28.0	22.0	13.0	89.0	196.0
0100	24.0	17.0	8.0	17.0	66.0	9.0	12.0	9.0	15.0	45.0	111.0
0200	8.0	11.0	12.0	6.0	37.0	5.0	5.0	14.0	6.0	30.0	67.0
0300	7.0	14.0	9.0	8.0	38.0	5.0	9.0	13.0	9.0	36.0	74.0
0400	19.0	23.0	22.0	29.0	93.0	17.0	16.0	30.0	43.0	106.0	199.0
0500	27.0	46.0	59.0	123.0	255.0	37.0	50.0	89.0	182.0	358.0	613.0
0600	146.0	198.0	224.0	202.0	770.0	255.0	264.0	271.0	286.0	1076.0	1846.0
0700	242.0	246.0	257.0	251.0	996.0	284.0	291.0	287.0	262.0	1124.0	2120.0
0800	238.0	199.0	175.0	165.0	777.0	193.0	190.0	157.0	183.0	723.0	1500.0
0900	147.0	168.0	170.0	184.0	669.0	147.0	130.0	164.0	155.0	596.0	1265.0
1000	155.0	142.0	153.0	177.0	627.0	141.0	158.0	149.0	149.0	597.0	1224.0
1100	235.0	191.0	228.0	184.0	838.0	177.0	205.0	192.0	225.0	799.0	1637.0
1200	195.0	194.0	215.0	192.0	796.0	181.0	187.0	228.0	200.0	796.0	1592.0
1300	140.0	223.0	203.0	214.0	780.0	162.0	215.0	182.0	193.0	752.0	1532.0
1400	202.0	199.0	208.0	211.0	820.0	200.0	194.0	184.0	195.0	773.0	1593.0
1500	260.0	251.0	350.0	360.0	1221.0	184.0	242.0	216.0	275.0	917.0	2138.0
1600	348.0	367.0	355.0	395.0	1465.0	240.0	262.0	281.0	296.0	1079.0	2544.0
1700	396.0	357.0	310.0	251.0	1314.0	292.0	293.0	263.0	228.0	1076.0	2390.0
1800	273.0	229.0	183.0	167.0	852.0	183.0	186.0	160.0	141.0	670.0	1522.0
1900	150.0	162.0	145.0	130.0	587.0	139.0	141.0	150.0	141.0	571.0	1158.0
2000	143.0	105.0	102.0	91.0	441.0	111.0	107.0	97.0	101.0	416.0	857.0
2100	105.0	100.0	93.0	82.0	380.0	90.0	102.0	81.0	99.0	372.0	752.0
2200	65.0	53.0	49.0	58.0	225.0	66.0	89.0	49.0	41.0	245.0	470.0
2300	76.0	47.0	57.0	33.0	213.0	34.0	34.0	38.0	23.0	129.0	342.0
24-Hour Totals:					14367					13375	27742

Peak Volume Information

	Direction: N Hour	Volume	Direction: S Hour	Volume	Combined Directions Hour	Volume
A.M.	0700	996	0645	1148	0700	2120
P.M.	1615	1513	1630	1162	1630	2665
Daily	1615	1513	1630	1162	1630	2665

EXHIBIT B

EXHIBIT B

575141-20020709.SYN

24-Hour Totals: 14367 13375
27742

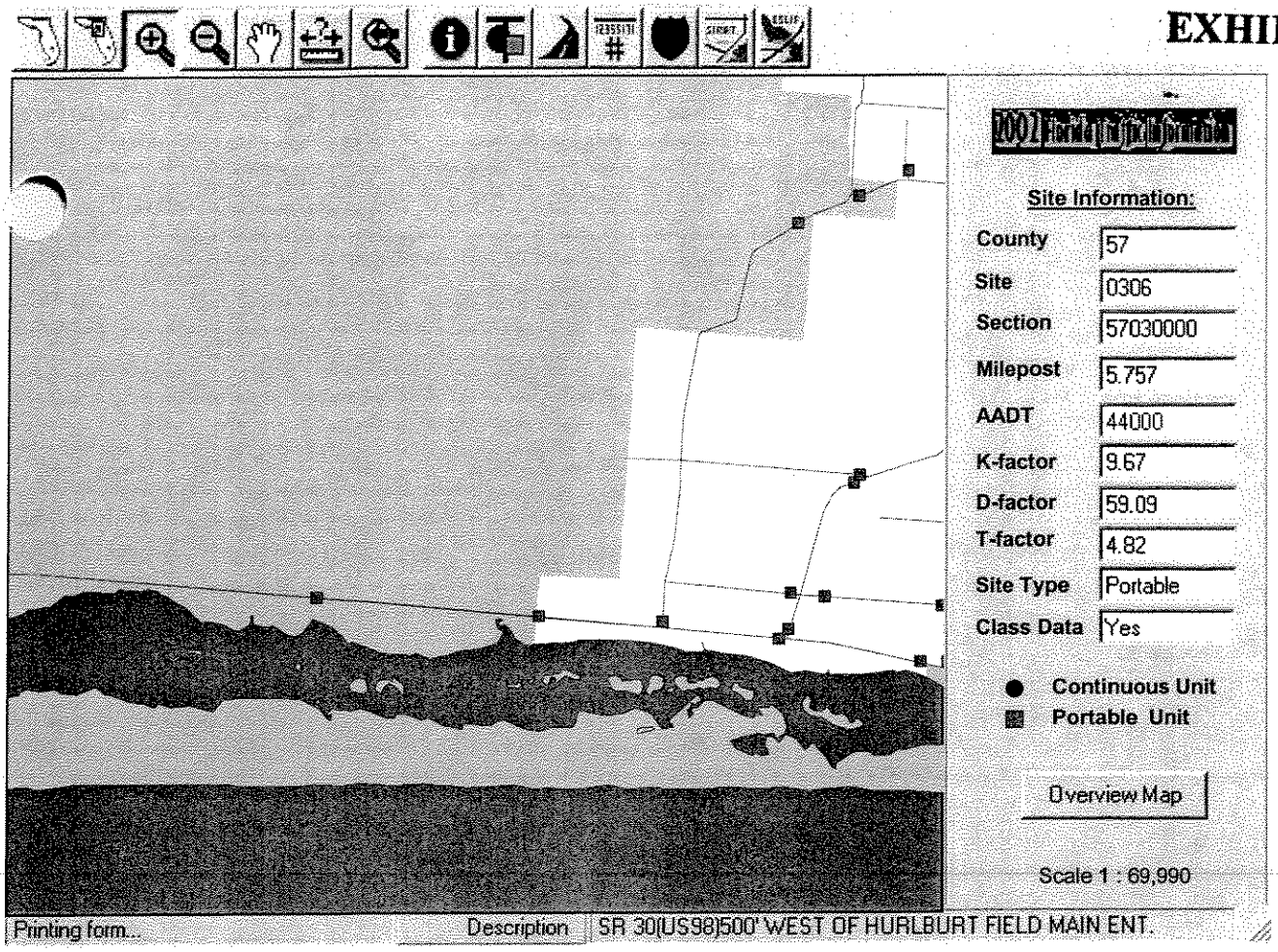
Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0700	996	0645	1148	0700	2120
P.M.	1615	1513	1630	1162	1630	2665
Daily	1615	1513	1630	1162	1630	2665

EXHIBIT B

HILL AVE/FREEDOM WAY
LOVE JOY RD
HOLLYWOOD BLVD
MARVESTHER BLVD
MIRACLE STRIP PKWY
AIR COMMANDO BLVD
US 98/SR 30

EXHIBIT B


2002 Florida Traffic Information
Site Information:
County 57
Site 0306
Section 57030000
Milepost 5.757
AADT 44000
K-factor 9.67
D-factor 59.09
T-factor 4.82
Site Type Portable
Class Data Yes
Continuous Unit
Portable Unit
Overview Map
Scale 1 : 69,990
Printing form...
Description
SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.

570306-20020619.SYN

County: 57
Station: 0306
Desciption: SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.
Start Date: 06/19/2002
Start Time: 1100

Time	Direction: E 1st	2nd	3rd	4th	Total	Direction: W 1st	2nd	3rd	4th	Total	Combined Total
0000	38.0	38.0	32.0	30.0	138.0	99.0	82.0	52.0	45.0	278.0	416.0
0100	29.0	25.0	19.0	16.0	89.0	55.0	43.0	38.0	39.0	175.0	264.0
0200	23.0	19.0	13.0	16.0	71.0	33.0	33.0	25.0	28.0	119.0	190.0
0300	20.0	25.0	19.0	27.0	91.0	21.0	22.0	17.0	21.0	81.0	172.0
0400	28.0	40.0	65.0	75.0	208.0	22.0	27.0	26.0	27.0	102.0	310.0
0500	91.0	147.0	250.0	369.0	857.0	25.0	31.0	58.0	58.0	172.0	1029.0
0600	572.0	681.0	728.0	761.0	2742.0	99.0	106.0	112.0	128.0	445.0	3187.0
0700	684.0	708.0	726.0	700.0	2818.0	168.0	216.0	176.0	202.0	762.0	3580.0
0800	517.0	470.0	463.0	493.0	1943.0	191.0	224.0	215.0	234.0	864.0	2807.0
0900	409.0	382.0	381.0	405.0	1577.0	245.0	240.0	272.0	257.0	1014.0	2591.0
1000	295.0	374.0	348.0	340.0	1357.0	320.0	276.0	316.0	306.0	1218.0	2575.0
1100	379.0	325.0	394.0	377.0	1475.0	339.0	330.0	327.0	336.0	1332.0	2807.0
1200	387.0	353.0	383.0	336.0	1459.0	337.0	385.0	360.0	340.0	1422.0	2881.0
1300	345.0	307.0	348.0	320.0	1320.0	387.0	365.0	363.0	340.0	1455.0	2775.0
1400	336.0	321.0	377.0	312.0	1346.0	400.0	443.0	425.0	408.0	1676.0	3022.0
1500	342.0	313.0	365.0	330.0	1350.0	467.0	495.0	569.0	623.0	2154.0	3504.0
1600	311.0	321.0	356.0	306.0	1294.0	723.0	708.0	587.0	490.0	2508.0	3802.0
1700	295.0	352.0	309.0	283.0	1239.0	670.0	725.0	672.0	664.0	2731.0	3970.0
1800	295.0	307.0	276.0	265.0	1143.0	655.0	662.0	429.0	374.0	2120.0	3263.0
1900	226.0	190.0	203.0	178.0	797.0	371.0	350.0	302.0	291.0	1314.0	2111.0
2000	167.0	143.0	129.0	151.0	590.0	327.0	325.0	246.0	342.0	1240.0	1830.0
2100	145.0	165.0	128.0	113.0	551.0	304.0	268.0	249.0	207.0	1028.0	1579.0
2200	130.0	116.0	105.0	73.0	424.0	154.0	153.0	136.0	127.0	570.0	994.0
2300	62.0	58.0	52.0	41.0	213.0	120.0	125.0	107.0	96.0	448.0	661.0
24-Hour Totals:					25092					25228	50320

Peak Volume Information

	Direction: E Hour	Volume	Direction: W Hour	Volume	Combined Directions Hour	Volume
A.M.	0630	2881	1145	1418	0700	3580
P.M.	1200	1459	1700	2731	1700	3970
Daily	0630	2881	1700	2731	1700	3970

Truck Percentage 5.00 5.00 5.00

EXHIBIT B

Print Date: April 2004

Florida Department of Transportation
Transportation Statistics Office

Annual Average Daily Traffic Report

County : 57 -- OKALOOSA

SITE	Site Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0306	P	SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.	22,000 E	22,000.00 W	44,000.00 C	9.67 F	59.09 F	4.82 A

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0306	SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.	45,000	46,000	47,000	48,000	49,000	50,000	50,000	51,000		

4/6/2004

Print Date: April 06, 2004

Florida Department of Transportation
Transportation Statistics Office
Annual Vehicle Classification Report
Count Year 2002

EXHIBIT B

County: 57 - OKALOOSA

	Co Sec Sub:	MilePost:	AADT	Description:
0306	57030000	5.76	44,000	SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.

Func. Class: 14 - Urban Other Principal Arterial

Survey Type: P - PORTABLE **Duration(In Days):** 1

			Annual Average Daily Volume	Percentage
Class	01	MOTORCYCLES	158	0
Class	02	CARS	32,124	73
Class	03	PICK-UPS AND VANS	9,596	22
Class	04	BUSES	44	0
Class	05	2-AXLE, SINGLE UNIT TRUCKS	1,456	3
Class	06	3-AXLE, SINGLE UNIT TRUCKS	207	0
Class	07	4-AXLE, SINGLE UNIT TRUCKS	0	0
Class	08	2-AXL TRCTR W/ 1 OR 2-AXL TRLR, 3-AXL TRCTR W/ 1-A	119	0
Class	09	3-AXLE TRACTOR W/ 2-AXLE TRLR	277	1
Class	10	3-AXLE TRACTOR W/ 3-AXLE TRLR	4	0
Class	11	5-AXLE MULTI-TRLR	4	0
Class	12	6-AXLE MULTI-TRLR	0	0
Class	13	ANY 7 OR MORE AXLE	4	0
Class	14	NOT USED	0	0
Class	15	OTHER	0	0
			44,000	100

Summary Daily Statistics

Daily			Design Hour		
24T&B	=	4.82	DHT	=	2.41
24T	=	4.71			
24H	=	1.40	DH3	=	0.70
24M	=	3.42	DH2	=	1.71

Classes: Passenger Vehicles 01-03, Truck and Busses 04-13, Trucks 05-13, Medium Trucks 04-05, Heavy Trucks 06-13

* The Totals for Volume and Percentage are rounded.

EXHIBIT B

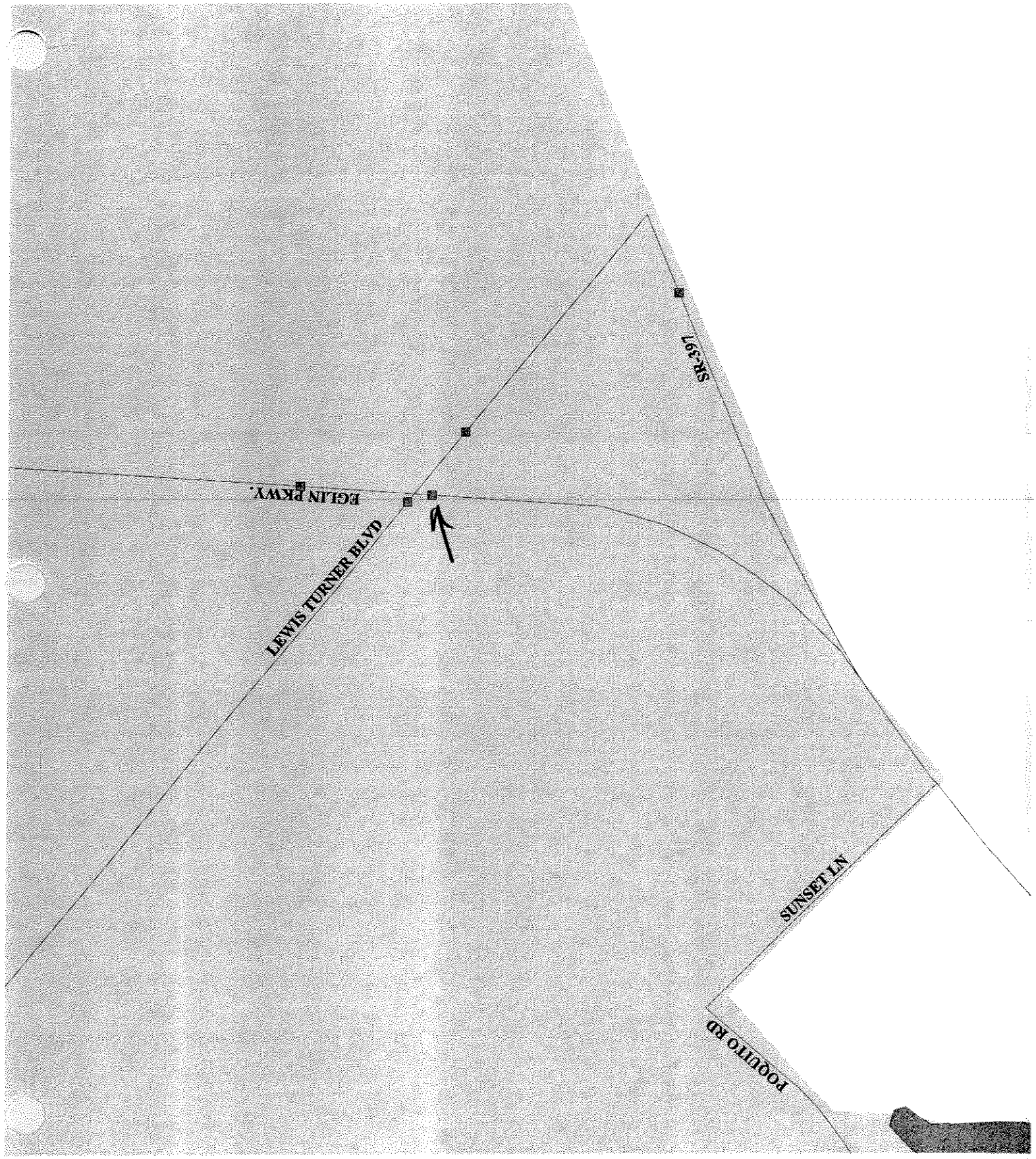
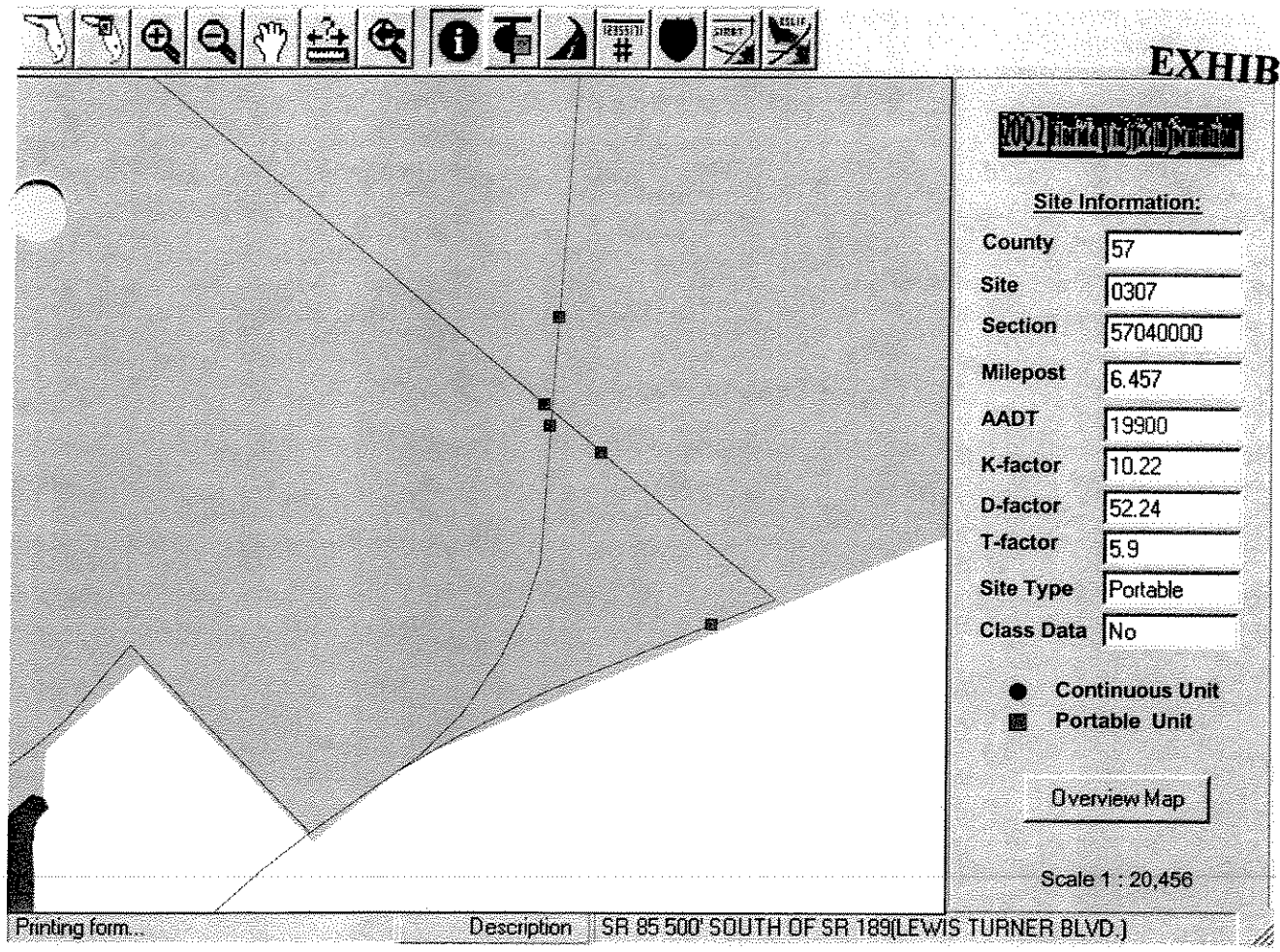


EXHIBIT B



Site Information:

County	57
Site	0307
Section	57040000
Milepost	6.457
AADT	19900
K-factor	10.22
D-factor	52.24
T-factor	5.9
Site Type	Portable
Class Data	No

● Continuous Unit
■ Portable Unit

Overview Map

Scale 1 : 20,456

Printing form... Description SR 85 500' SOUTH OF SR 189(LEWIS TURNER BLVD.)

570307-20020624.SYN

County: 57
Station: 0307
Desciption: SR 85 500' SOUTH OF SR 189(LEWIS TURNER BLVD.)
Start Date: 06/24/2002
Start Time: 0600

Time	Direction: N 1st	2nd	3rd	4th	Total	Direction: S 1st	2nd	3rd	4th	Total	Combined Total
0000	28.0	28.0	17.0	15.0	88.0	10.0	12.0	18.0	11.0	51.0	139.0
0100	11.0	13.0	13.0	9.0	46.0	10.0	5.0	13.0	9.0	37.0	83.0
0200	15.0	15.0	4.0	8.0	42.0	5.0	4.0	2.0	5.0	16.0	58.0
0300	6.0	12.0	10.0	16.0	44.0	1.0	7.0	11.0	9.0	28.0	72.0
0400	11.0	15.0	31.0	32.0	89.0	11.0	11.0	15.0	21.0	58.0	147.0
0500	33.0	46.0	54.0	81.0	214.0	32.0	42.0	55.0	83.0	212.0	426.0
0600	110.0	137.0	143.0	152.0	542.0	108.0	141.0	163.0	173.0	585.0	1127.0
0700	194.0	202.0	204.0	242.0	842.0	239.0	253.0	334.0	368.0	1194.0	2036.0
0800	177.0	177.0	166.0	167.0	687.0	206.0	176.0	138.0	159.0	679.0	1366.0
0900	123.0	156.0	147.0	127.0	553.0	115.0	145.0	124.0	132.0	516.0	1069.0
1000	143.0	115.0	142.0	145.0	545.0	147.0	139.0	134.0	125.0	545.0	1090.0
1100	133.0	141.0	131.0	144.0	549.0	126.0	157.0	106.0	113.0	502.0	1051.0
1200	129.0	127.0	126.0	145.0	527.0	172.0	137.0	146.0	154.0	609.0	1136.0
1300	152.0	147.0	135.0	159.0	593.0	131.0	139.0	126.0	145.0	541.0	1134.0
1400	163.0	148.0	136.0	151.0	598.0	132.0	142.0	161.0	151.0	586.0	1184.0
1500	141.0	180.0	189.0	204.0	714.0	143.0	190.0	182.0	171.0	686.0	1400.0
1600	235.0	206.0	184.0	245.0	870.0	229.0	144.0	180.0	151.0	704.0	1574.0
1700	285.0	296.0	258.0	206.0	1045.0	198.0	160.0	154.0	109.0	621.0	1666.0
1800	168.0	168.0	141.0	155.0	632.0	134.0	106.0	95.0	110.0	445.0	1077.0
1900	115.0	104.0	100.0	95.0	414.0	70.0	78.0	64.0	85.0	297.0	711.0
2000	69.0	102.0	86.0	90.0	347.0	46.0	61.0	58.0	58.0	223.0	570.0
2100	82.0	72.0	74.0	84.0	312.0	60.0	47.0	48.0	34.0	189.0	501.0
2200	78.0	81.0	39.0	46.0	244.0	29.0	28.0	33.0	14.0	104.0	348.0
2300	44.0	60.0	24.0	28.0	156.0	17.0	39.0	14.0	18.0	88.0	244.0
24-Hour Totals:					10693					9516.0	20209

Peak Volume Information

	Direction: N Hour	Volume	Direction: S Hour	Volume	Combined Directions Hour	Volume
A.M.	0700	842	0700	1194	0700	2036
P.M.	1645	1084	1515	772	1645	1747
Daily	1645	1084	0700	1194	0700	2036

EXHIBIT B

Print Date: Febru[illegible]1, 2004

Florida D[illegible]tment of Transportation
Transi[illegible]ion Statistics Office

2002 Annual Av[illegible]age Daily Traffic Report

County 57 -- OKALOOSA
:

SITE	Site Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0307	P	SR 85 500' SOUTH OF SR 189(LEWIS TURNER BLVD.)	10,500 N	9,400.00 S	19,900.00 C	10.22 F	52.24 F	5.90 F

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

[illegible]	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0307	SR 85 500' SOUTH OF SR 189(LEWIS TURNER BLVD.)	20,000	21,000	21,000	21,000	22,000					

EXHIBIT B

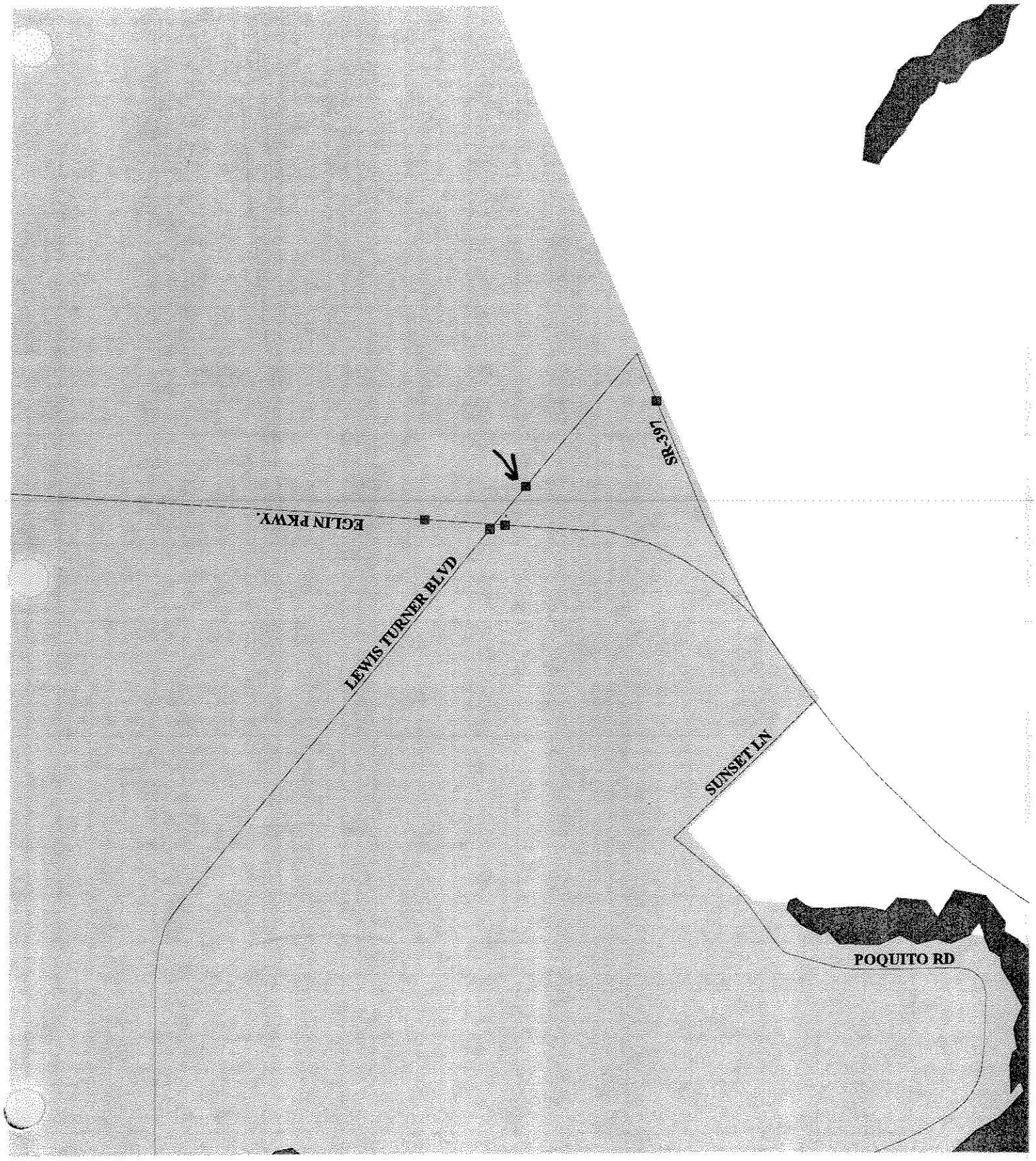
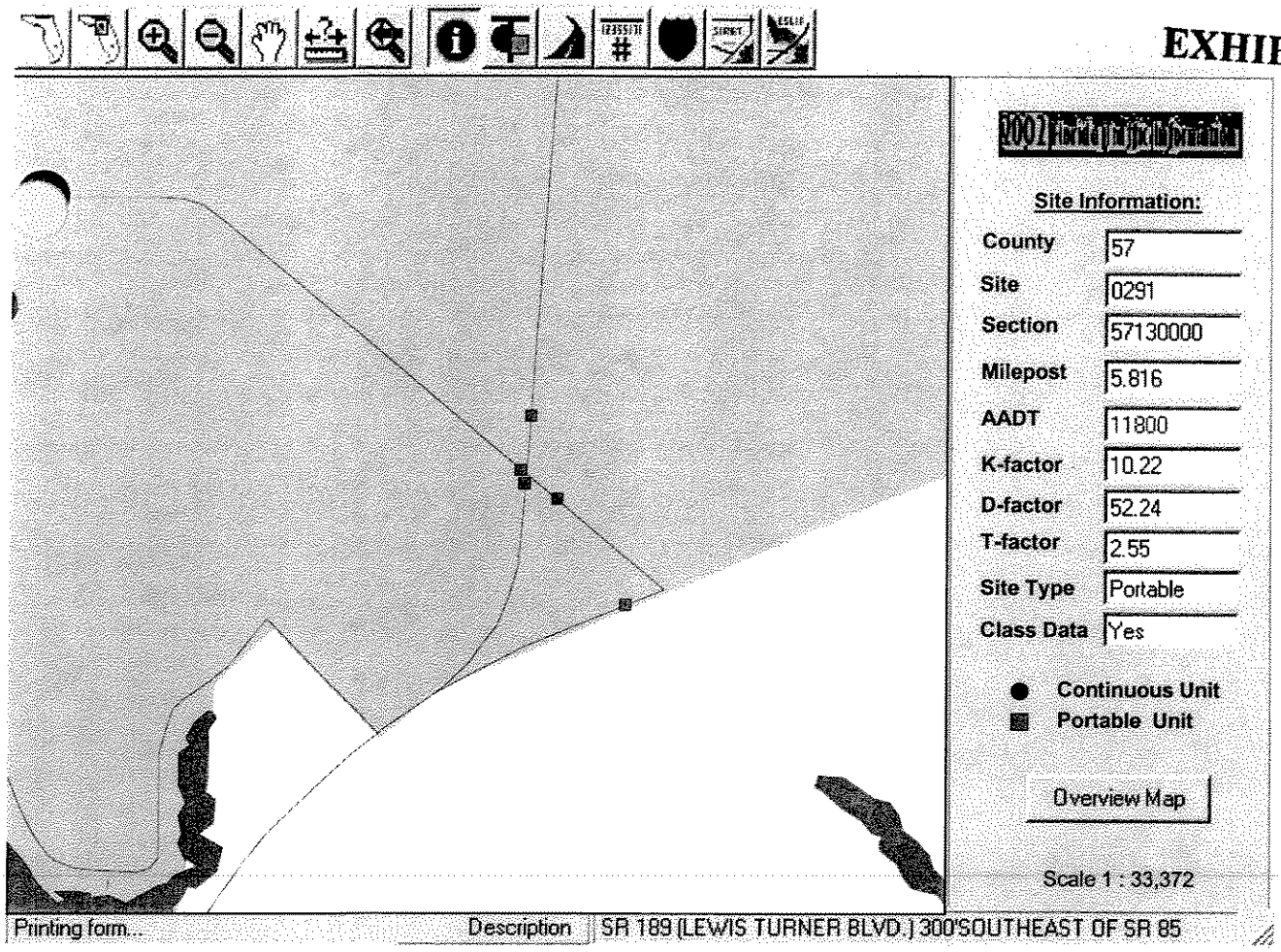


EXHIBIT B


2002 Florida Traffic Information
Site Information:
County 57
Site 0291
Section 57130000
Milepost 5.816
AADT 11800
K-factor 10.22
D-factor 52.24
T-factor 2.55
Site Type Portable
Class Data Yes
Continuous Unit
Portable Unit
Overview Map
Scale 1 : 33,372
Printing form...
Description
SR 189 (LEWIS TURNER BLVD.) 300'SOUTHEAST OF SR 85

Print Date: Februa , 2004

Florida D ment of Transportation
Transp on Statistics Office

2002 Annual Av ge Daily Traffic Report

County 57 -- OKALOOSA
:

SITE	Site Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0291	P	SR 189 (LEWIS TURNER BLVD.) 300'SOUTHEAST OF SR 85	5,900 N	5,900.00 S	11,800.00 C	10.22 F	52.24 F	2.55 A

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

AADT FORECAST

EXHIBIT B

COUNTY: 57 COUNTY CODE: 57

	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0291	SR 189 (LEWIS TURNER BLVD.) 300'SOUTHEAST OF SR 85	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	

2/17/200

Print Date: February 13, 2004

Florida Department of Transportation
Transportation Statistics Office
Annual Vehicle Classification Report
Count Year 2002

EXHIBIT B

County: 57 - OKALOOSA

Co Sec Sub:	MilePost:	AADT	Description:
57130000	5.82	11,800	SR 189 (LEWIS TURNER BLVD.) 300'SOUTHEAST OF SR 85

Func. Class: 16 - Urban Minor Arterial

Survey Type: P - PORTABLE **Duration(In Days):** 1

			Annual Average Daily Volume	Percentage
Class	01	MOTORCYCLES	52	0
Class	02	CARS	9,547	81
Class	03	PICK-UPS AND VANS	1,900	16
Class	04	BUSES	0	0
Class	05	2-AXLE, SINGLE UNIT TRUCKS	241	2
Class	06	3-AXLE, SINGLE UNIT TRUCKS	25	0
Class	07	4-AXLE, SINGLE UNIT TRUCKS	0	0
Class	08	2-AXL TRCTR W/ 1 OR 2-AXL TRLR, 3-AXL TRCTR W/ 1-A	11	0
Class	09	3-AXLE TRACTOR W/ 2-AXLE TRLR	21	0
Class	10	3-AXLE TRACTOR W/ 3-AXLE TRLR	4	0
Class	11	5-AXLE MULTI-TRLR	0	0
Class	12	6-AXLE MULTI-TRLR	0	0
Class	13	ANY 7 OR MORE AXLE	0	0
Class	14	NOT USED	0	0
Class	15	OTHER	0	0
			11,800	100

Summary Daily Statistics

Daily			Design Hour		
24T&B	=	2.55	**DHT**	=	1.27
24T	=	2.55			
24H	=	0.51	**DH3**	=	0.26
24M	=	2.04	**DH2**	=	1.02

Classes: Passenger Vehicles 01-03, Truck and Busses 04-13, Trucks 05-13, Medium Trucks 04-05, Heavy Trucks 06-13

* The Totals for Volume and Percentage are rounded.

570291-20020619.SYN

County: 57
Station: 0291
Desciption: SR 189 (LEWIS TURNER BLVD.) 300'SOUTHEAST OF SR 85
Start Date: 06/19/2002
Start Time: 1300

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	15.0	8.0	6.0	7.0	36.0	18.0	9.0	5.0	10.0	42.0	78.0
0100	3.0	9.0	1.0	5.0	18.0	9.0	4.0	4.0	4.0	21.0	39.0
0200	2.0	2.0	0.0	2.0	6.0	4.0	4.0	5.0	3.0	16.0	22.0
0300	0.0	2.0	7.0	3.0	12.0	1.0	3.0	3.0	5.0	12.0	24.0
0400	9.0	17.0	14.0	20.0	60.0	8.0	3.0	5.0	3.0	19.0	79.0
0500	26.0	25.0	68.0	95.0	214.0	19.0	35.0	15.0	1.0	70.0	284.0
0600	155.0	255.0	271.0	245.0	926.0	2.0	0.0	1.0	3.0	6.0	932.0
0700	199.0	194.0	151.0	106.0	650.0	5.0	4.0	0.0	0.0	9.0	659.0
0800	88.0	81.0	82.0	82.0	333.0	32.0	39.0	60.0	71.0	202.0	535.0
0900	70.0	80.0	71.0	84.0	305.0	64.0	81.0	83.0	56.0	284.0	589.0
1000	70.0	70.0	76.0	68.0	284.0	78.0	89.0	97.0	131.0	395.0	679.0
1100	70.0	59.0	74.0	81.0	284.0	127.0	107.0	108.0	92.0	434.0	718.0
1200	83.0	95.0	96.0	79.0	353.0	106.0	96.0	81.0	87.0	370.0	723.0
1300	98.0	86.0	89.0	70.0	343.0	115.0	78.0	81.0	102.0	376.0	719.0
1400	77.0	89.0	90.0	76.0	332.0	103.0	100.0	120.0	94.0	417.0	749.0
1500	62.0	61.0	87.0	78.0	288.0	171.0	162.0	234.0	182.0	749.0	1037.0
1600	75.0	72.0	71.0	72.0	290.0	258.0	232.0	189.0	187.0	866.0	1156.0
1700	78.0	79.0	82.0	68.0	307.0	180.0	133.0	134.0	114.0	561.0	868.0
1800	59.0	43.0	54.0	51.0	207.0	99.0	77.0	96.0	54.0	326.0	533.0
1900	42.0	42.0	35.0	30.0	149.0	69.0	68.0	49.0	45.0	231.0	380.0
2000	39.0	37.0	40.0	36.0	152.0	59.0	43.0	39.0	39.0	180.0	332.0
2100	48.0	35.0	32.0	41.0	156.0	35.0	34.0	26.0	30.0	125.0	281.0
2200	35.0	20.0	21.0	20.0	96.0	24.0	37.0	18.0	18.0	97.0	193.0
2300	13.0	16.0	19.0	10.0	58.0	27.0	13.0	16.0	9.0	65.0	123.0
24-Hour Totals:					5859.0					5873.0	11732

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0615	970	1045	473	0615	979
P.M.	1215	368	1530	906	1530	1218
Daily	0615	970	1530	906	1530	1218
Truck Percentage	2.00		3.00		3.00	

EXHIBIT B

EXHIBIT B

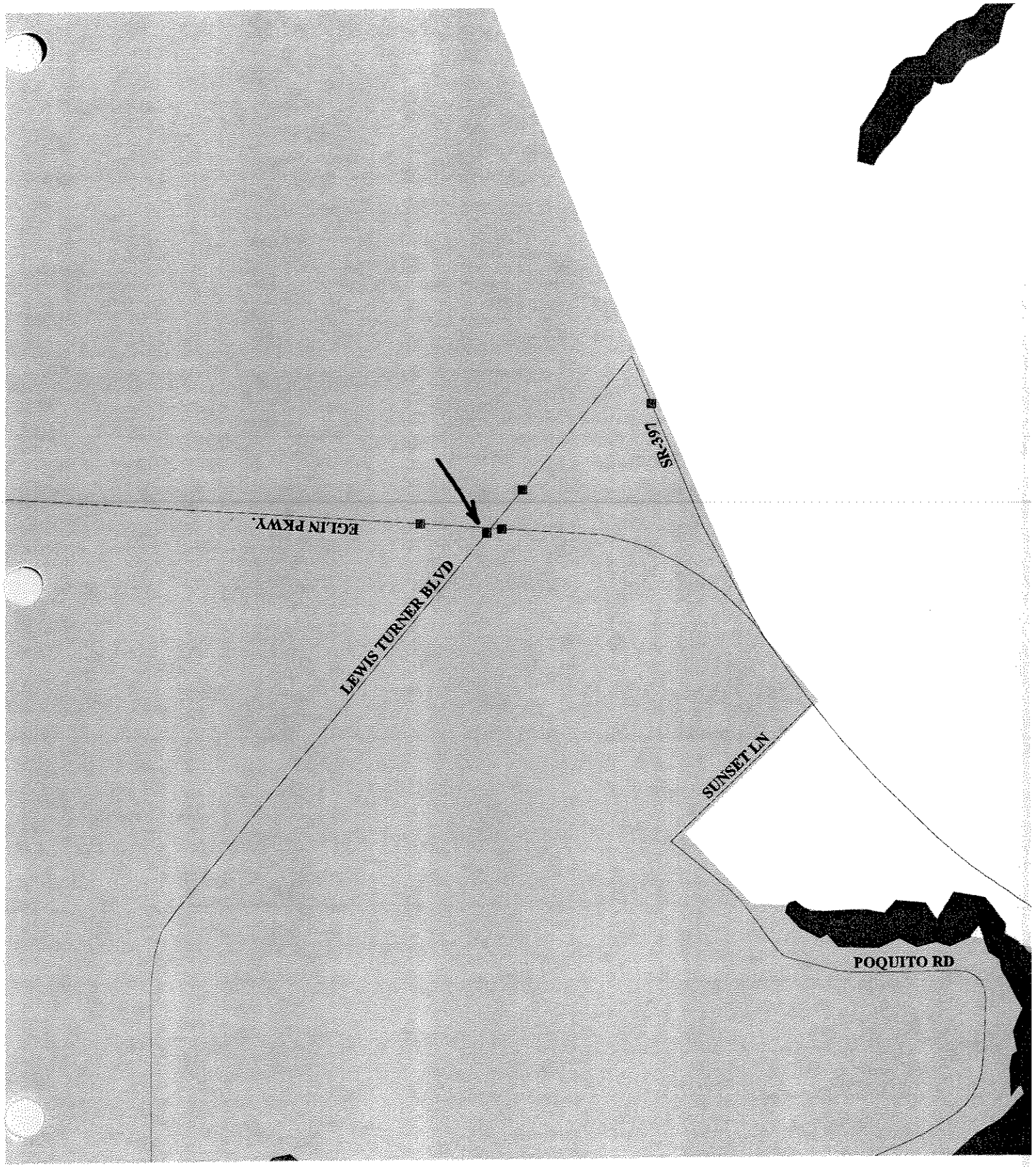
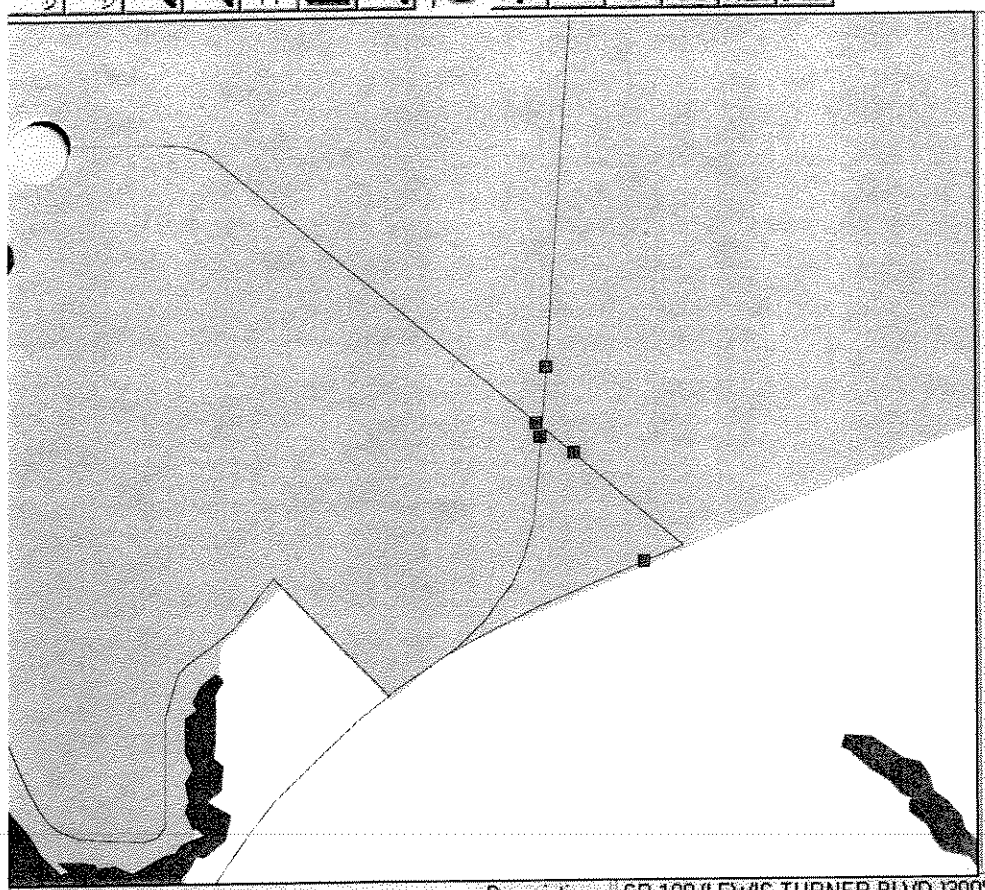


EXHIBIT B



2002 Florida Traffic Information

Site Information:

County	57
Site	0290
Section	57130000
Milepost	5.686
AADT	21800
K-factor	10.22
D-factor	52.24
T-factor	4.5
Site Type	Portable
Class Data	Yes

● **Continuous Unit**
▩ **Portable Unit**

Overview Map

Scale 1 : 33,372

Printing form...

Description | SR 189 (LEWIS TURNER BLVD.)300' NORTHWEST OF SR 85

Florida D[illegible]ment of Transportation
Transp[illegible]ion Statistics Office

2002 Annual Average Daily Traffic Report

County : 57 -- OKALOOSA

Site SITE	Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0290	P	SR 189 (LEWIS TURNER BLVD.)300' NORTHWEST OF SR 85	5,800 N	16,000.00 S	21,800.00 C	10.22 F	52.24 F	4.50 A

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

EXHIBIT B

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0290	SR 189 (LEWIS TURNER BLVD.)300' NORTHWEST OF SR 85	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	

2/18/200

EXHIBIT B

570290-20020619.SYN

County: 57
Station: 0290
Desciption: SR 189 (LEWIS TURNER BLVD.)300' NORTHWEST OF SR 85
Start Date: 06/19/2002
Start Time: 1200

Combined Time Total	Direction: N 1st	2nd	3rd	4th	Total	Direction: S 1st	2nd	3rd	4th	Total
0000	11.0	11.0	4.0	4.0	30.0	33.0	38.0	27.0	25.0	123.0
153.0 0100	8.0	3.0	6.0	4.0	21.0	13.0	24.0	10.0	15.0	62.0
83.0 0200	2.0	4.0	3.0	1.0	10.0	19.0	12.0	7.0	16.0	54.0
64.0 0300	3.0	4.0	1.0	3.0	11.0	8.0	15.0	18.0	22.0	63.0
74.0 0400	8.0	3.0	5.0	4.0	20.0	23.0	28.0	36.0	38.0	125.0
145.0 0500	21.0	30.0	25.0	41.0	117.0	38.0	61.0	101.0	127.0	327.0
444.0 0600	49.0	30.0	42.0	49.0	170.0	213.0	329.0	403.0	286.0	1231.0
1401.0 0700	41.0	45.0	56.0	47.0	189.0	317.0	341.0	314.0	210.0	1182.0
1371.0 0800	56.0	53.0	54.0	60.0	223.0	211.0	196.0	215.0	230.0	852.0
1075.0 0900	53.0	83.0	67.0	55.0	258.0	182.0	212.0	186.0	180.0	760.0
1018.0 1000	77.0	52.0	91.0	101.0	321.0	181.0	174.0	207.0	208.0	770.0
1091.0 1100	120.0	91.0	103.0	91.0	405.0	176.0	190.0	253.0	247.0	866.0
1271.0 1200	96.0	107.0	82.0	80.0	365.0	234.0	258.0	247.0	255.0	994.0
1359.0 1300	89.0	93.0	94.0	92.0	368.0	248.0	262.0	262.0	232.0	1004.0
1372.0 1400	93.0	86.0	105.0	90.0	374.0	274.0	240.0	293.0	252.0	1059.0
1433.0 1500	143.0	136.0	196.0	167.0	642.0	250.0	317.0	312.0	308.0	1187.0
1829.0 1600	226.0	201.0	167.0	179.0	773.0	219.0	118.0	108.0	126.0	571.0
1344.0 1700	161.0	144.0	126.0	90.0	521.0	409.0	373.0	336.0	270.0	1388.0
1909.0 1800	106.0	73.0	82.0	51.0	312.0	267.0	244.0	174.0	169.0	854.0
1166.0 1900	59.0	60.0	45.0	45.0	209.0	171.0	134.0	143.0	145.0	593.0
802.0 2000	48.0	43.0	33.0	46.0	170.0	123.0	136.0	133.0	163.0	555.0
725.0 2100	31.0	28.0	20.0	28.0	107.0	143.0	134.0	121.0	122.0	520.0
627.0 2200	18.0	37.0	20.0	16.0	91.0	107.0	88.0	53.0	59.0	307.0
398.0 2300	26.0	11.0	12.0	8.0	57.0	52.0	59.0	46.0	31.0	188.0
245.0										

EXHIBIT B

570290-20020619.SYN

24-Hour Totals: 5764.0 15635
21399

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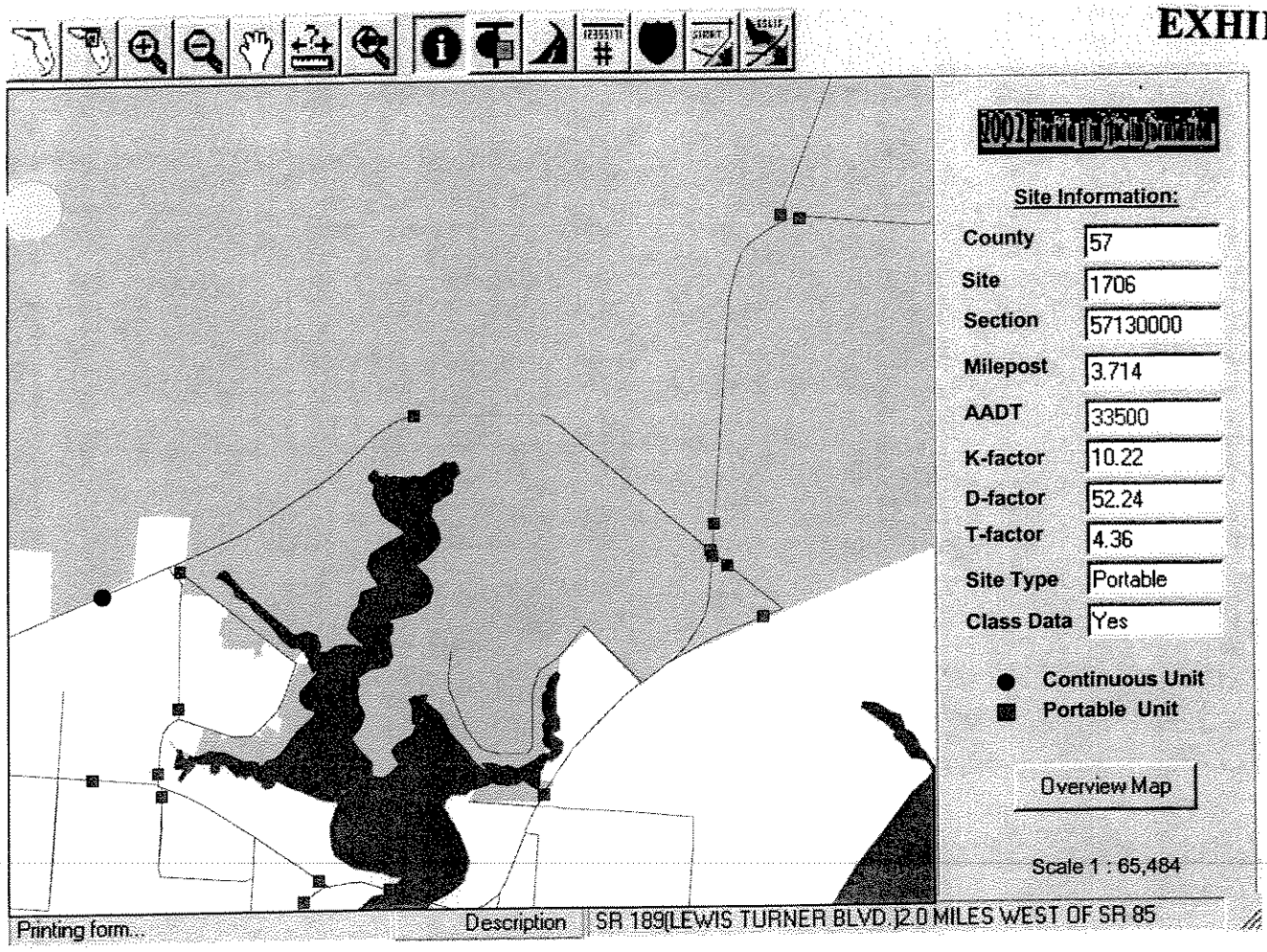
Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1045	415	0630	1347	0630	1524
P.M.	1530	790	1700	1388	1700	1909
Daily	1530	790	1700	1388	1700	1909
Truck Percentage	4.00		5.00		4.00	

EXHIBIT B

SR 123
EGLIN PKWY.
SR-397
SUNSET LN
12TH & 4TH AVENUE
POQUITO RD
RICHBOURG AVE
MOONEY ROAD
COUNTRY CLUB AVE
LEWIS TURNER BLVD
NEW CASTLE DR
S.R.188 RACETRACK RD
SOUTH ST
MAYFLOWER AVE

EXHIBIT B


2002 Florida Traffic Online
Site Information:
County 57
Site 1706
Section 57130000
Milepost 3.714
AADT 33500
K-factor 10.22
D-factor 52.24
T-factor 4.36
Site Type Portable
Class Data Yes
Continuous Unit
Portable Unit
Overview Map
Scale 1 : 65,484
Printing form...
Description SR 189(LEWIS TURNER BLVD.)2.0 MILES WEST OF SR 85

571706-20020618.SYN

County: 57
Station: 1706
Desciption: SR 189(LEWIS TURNER BLVD.)2.0 MILES WEST OF SR 85
Start Date: 06/18/2002
Start Time: 1100

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	63.0	33.0	16.0	25.0	137.0	27.0	24.0	26.0	21.0	98.0	235.0
0100	14.0	15.0	18.0	15.0	62.0	14.0	8.0	12.0	11.0	45.0	107.0
0200	18.0	13.0	17.0	7.0	55.0	7.0	8.0	17.0	8.0	40.0	95.0
0300	20.0	9.0	22.0	8.0	59.0	11.0	13.0	8.0	4.0	36.0	95.0
0400	20.0	29.0	39.0	28.0	116.0	11.0	18.0	41.0	36.0	106.0	222.0
0500	36.0	87.0	99.0	145.0	367.0	55.0	75.0	125.0	210.0	465.0	832.0
0600	202.0	338.0	362.0	282.0	1184.0	242.0	289.0	326.0	377.0	1234.0	2418.0
0700	324.0	276.0	292.0	249.0	1141.0	327.0	337.0	331.0	389.0	1384.0	2525.0
0800	193.0	186.0	216.0	197.0	792.0	266.0	254.0	245.0	228.0	993.0	1785.0
0900	186.0	202.0	189.0	160.0	737.0	158.0	229.0	210.0	215.0	812.0	1549.0
1000	181.0	165.0	195.0	185.0	726.0	193.0	229.0	249.0	244.0	915.0	1641.0
1100	204.0	228.0	204.0	222.0	858.0	264.0	247.0	257.0	229.0	997.0	1855.0
1200	262.0	240.0	239.0	242.0	983.0	226.0	213.0	228.0	203.0	870.0	1853.0
1300	271.0	265.0	256.0	258.0	1050.0	241.0	247.0	233.0	215.0	936.0	1986.0
1400	271.0	301.0	254.0	291.0	1117.0	228.0	229.0	271.0	272.0	1000.0	2117.0
1500	297.0	334.0	364.0	353.0	1348.0	312.0	392.0	462.0	491.0	1657.0	3005.0
1600	394.0	380.0	394.0	396.0	1564.0	415.0	362.0	310.0	292.0	1379.0	2943.0
1700	406.0	415.0	363.0	305.0	1489.0	281.0	299.0	225.0	223.0	1028.0	2517.0
1800	255.0	228.0	226.0	175.0	884.0	217.0	198.0	203.0	193.0	811.0	1695.0
1900	171.0	203.0	133.0	157.0	664.0	153.0	143.0	108.0	125.0	529.0	1193.0
2000	155.0	191.0	169.0	153.0	668.0	75.0	124.0	97.0	83.0	379.0	1047.0
2100	146.0	141.0	89.0	115.0	491.0	71.0	108.0	87.0	76.0	342.0	833.0
2200	107.0	92.0	67.0	50.0	316.0	61.0	63.0	57.0	63.0	244.0	560.0
2300	46.0	52.0	33.0	37.0	168.0	28.0	37.0	32.0	35.0	132.0	300.0
24-Hour Totals:					16976					16432	33408

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0615	1306	0700	1384	0615	2625
P.M.	1630	1611	1515	1760	1530	3221
Daily	1630	1611	1515	1760	1530	3221
Truck Percentage	4.00		4.00		4.00	

EXHIBIT B

Print Date: February 09, 2004

Florida Department of Transportation
Transportation Statistics Office

2002 Annual Average Daily Traffic Report

County 57 -- OKALOOSA
:

Site						AADT	"K"	"D"	"T"
SITE	**Type**	**Description**	**Direction 1**		**Direction 2**	**Two-Way**	**Factor**	**Factor**	**Factor**
0250	T	SR-189,1.6 MI N OF SR-188/US-98,OKALOOSA CO.	16,282	N	15,742.00 S	32,024.00 C	10.52 A	50.73 A	2.99 A

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = A[illegible] F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = [illegible] Reference

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0250	SR-189,1.6 MI N OF SR-188/US-98,OKALOOSA CO.	32,000	33,000	33,000	33,000	34,000					

2/9/2004

Print Date: February 09, 2004

Florida Department of Transportation
Transportation Statistics Office
Annual Vehicle Classification Report
Count Year 2002

EXHIBIT B

County: 57 - OKALOOSA

Co Sec Sub:	MilePost:	AADT	Description:
57130000	1.67	32,024	SR-189,1.6 MI N OF SR-188/US-98,OKALOOSA CO.

Func. Class: 16 - Urban Minor Arterial

Survey Type: T - TELEMETRY **Duration(In Days):** 360

			Annual Average Daily Volume	Percentage
Class	01	MOTORCYCLES	38	0
Class	02	CARS	26,762	84
Class	03	PICK-UPS AND VANS	4,262	13
Class	04	BUSES	138	0
Class	05	2-AXLE, SINGLE UNIT TRUCKS	352	1
Class	06	3-AXLE, SINGLE UNIT TRUCKS	163	1
Class	07	4-AXLE, SINGLE UNIT TRUCKS	26	0
Class	08	2-AXL TRCTR W/ 1 OR 2-AXL TRLR, 3-AXL TRCTR W/ 1-A	99	0
Class	09	3-AXLE TRACTOR W/ 2-AXLE TRLR	163	1
Class	10	3-AXLE TRACTOR W/ 3-AXLE TRLR	6	0
Class	11	5-AXLE MULTI-TRLR	10	0
Class	12	6-AXLE MULTI-TRLR	0	0
Class	13	ANY 7 OR MORE AXLE	0	0
Class	14	NOT USED	0	0
Class	15	OTHER	0	0
			32,024	100

Summary Daily Statistics

Daily			Design Hour		
24T&B	=	2.99	DHT	=	1.49
24T	=	2.56			
24H	=	1.46	DH3	=	0.73
24M	=	1.52	DH2	=	0.76

Classes: Passenger Vehicles 01-03, Truck and Busses 04-13, Trucks 05-13, Medium Trucks 04-05, Heavy Trucks 06-13

* The Totals for Volume and Percentage are rounded.

Print Date: Februa 2004

Florida De ment of Transportation
Transp on Statistics Office

2002 Annual Ave age Daily Traffic Report

County : 57 -- OKALOOSA

Site SITE	Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0250	T	SR-189,1.6 MI N OF SR-188/US-98,OKALOOSA CO.	16,282 N	15,742.00 S	32,024.00 C	10.52 A	50.73 A	2.99 A

EXHIBIT B

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

AADT FORECAST

EXHIBIT B

COUNTY: 57 COUNTY CODE: 57

[redacted]	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0250	SR-189,1.6 MI N OF SR-188/US-98,OKALOOSA CO.	32,000	33,000	33,000	33,000	34,000					

2/11/200

EXHIBIT B

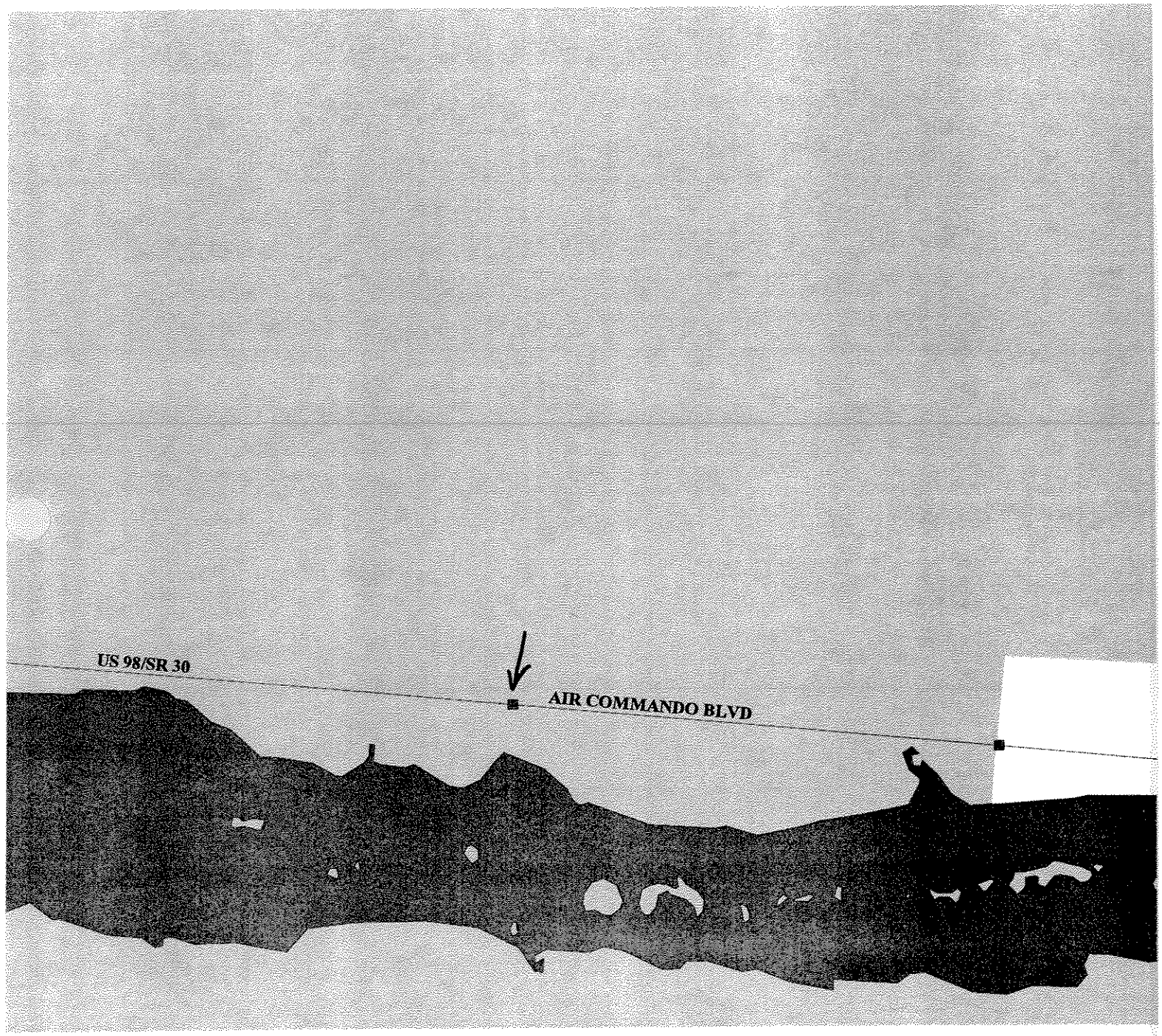
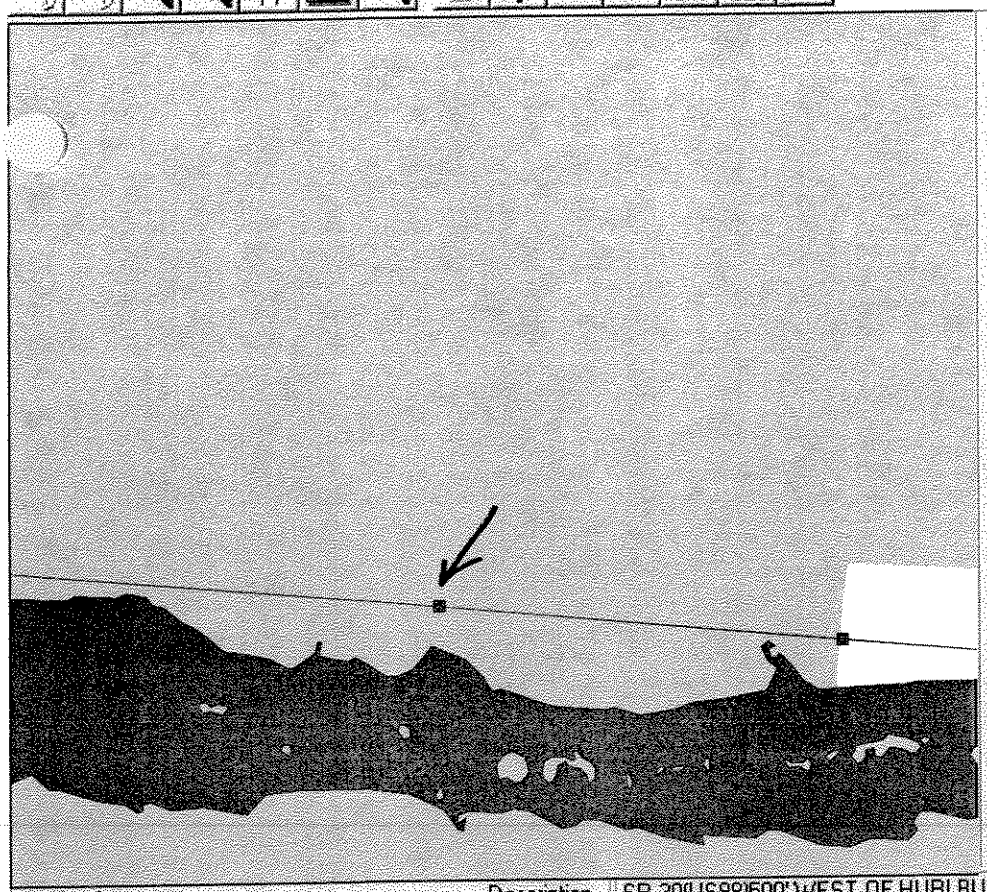


EXHIBIT B



2002 Florida Traffic Characteristics

Site Information:

County	57
Site	0306
Section	57030000
Milepost	5.757
AADT	44000
K-factor	9.67
D-factor	59.09
T-factor	4.82
Site Type	Portable
Class Data	Yes

● Continuous Unit
■ Portable Unit

Overview Map

Scale 1 : 39,457

Printing form... Description SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.

Print Date: April [illegible]04

Florida D[illegible]ment of Transportation
Transp[illegible]on Statistics Office

Annual Average Daily Traffic Report

County : 57 -- OKALOOSA

Site SITE	Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
0306	P	SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.	22,000 E	22,000.00 W	44,000.00 C	9.67 F	59.09 F	4.82 A

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

EXHIBIT B

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0306	SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.	45,000	46,000	47,000	48,000	49,000	50,000	50,000	51,000		

4/5/2004

570306-20020619.SYN

County: 57
Station: 0306
Desciption: SR 30(US98)500' WEST OF HURLBURT FIELD MAIN ENT.
Start Date: 06/19/2002
Start Time: 1100

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38.0	38.0	32.0	30.0	138.0	99.0	82.0	52.0	45.0	278.0	416.0
0100	29.0	25.0	19.0	16.0	89.0	55.0	43.0	38.0	39.0	175.0	264.0
0200	23.0	19.0	13.0	16.0	71.0	33.0	33.0	25.0	28.0	119.0	190.0
0300	20.0	25.0	19.0	27.0	91.0	21.0	22.0	17.0	21.0	81.0	172.0
0400	28.0	40.0	65.0	75.0	208.0	22.0	27.0	26.0	27.0	102.0	310.0
0500	91.0	147.0	250.0	369.0	857.0	25.0	31.0	58.0	58.0	172.0	1029.0
0600	572.0	681.0	728.0	761.0	2742.0	99.0	106.0	112.0	128.0	445.0	3187.0
0700	684.0	708.0	726.0	700.0	2818.0	168.0	216.0	176.0	202.0	762.0	3580.0
0800	517.0	470.0	463.0	493.0	1943.0	191.0	224.0	215.0	234.0	864.0	2807.0
0900	409.0	382.0	381.0	405.0	1577.0	245.0	240.0	272.0	257.0	1014.0	2591.0
1000	295.0	374.0	348.0	340.0	1357.0	320.0	276.0	316.0	306.0	1218.0	2575.0
1100	379.0	325.0	394.0	377.0	1475.0	339.0	330.0	327.0	336.0	1332.0	2807.0
1200	387.0	353.0	383.0	336.0	1459.0	337.0	385.0	360.0	340.0	1422.0	2881.0
1300	345.0	307.0	348.0	320.0	1320.0	387.0	365.0	363.0	340.0	1455.0	2775.0
1400	336.0	321.0	377.0	312.0	1346.0	400.0	443.0	425.0	408.0	1676.0	3022.0
1500	342.0	313.0	365.0	330.0	1350.0	467.0	495.0	569.0	623.0	2154.0	3504.0
1600	311.0	321.0	356.0	306.0	1294.0	723.0	708.0	587.0	490.0	2508.0	3802.0
1700	295.0	352.0	309.0	283.0	1239.0	670.0	725.0	672.0	664.0	2731.0	3970.0
1800	295.0	307.0	276.0	265.0	1143.0	655.0	662.0	429.0	374.0	2120.0	3263.0
1900	226.0	190.0	203.0	178.0	797.0	371.0	350.0	302.0	291.0	1314.0	2111.0
2000	167.0	143.0	129.0	151.0	590.0	327.0	325.0	246.0	342.0	1240.0	1830.0
2100	145.0	165.0	128.0	113.0	551.0	304.0	268.0	249.0	207.0	1028.0	1579.0
2200	130.0	116.0	105.0	73.0	424.0	154.0	153.0	136.0	127.0	570.0	994.0
2300	62.0	58.0	52.0	41.0	213.0	120.0	125.0	107.0	96.0	448.0	661.0
24-Hour Totals:					25092					25228	50320

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0630	2881	1145	1418	0700	3580
P.M.	1200	1459	1700	2731	1700	3970
Daily	0630	2881	1700	2731	1700	3970

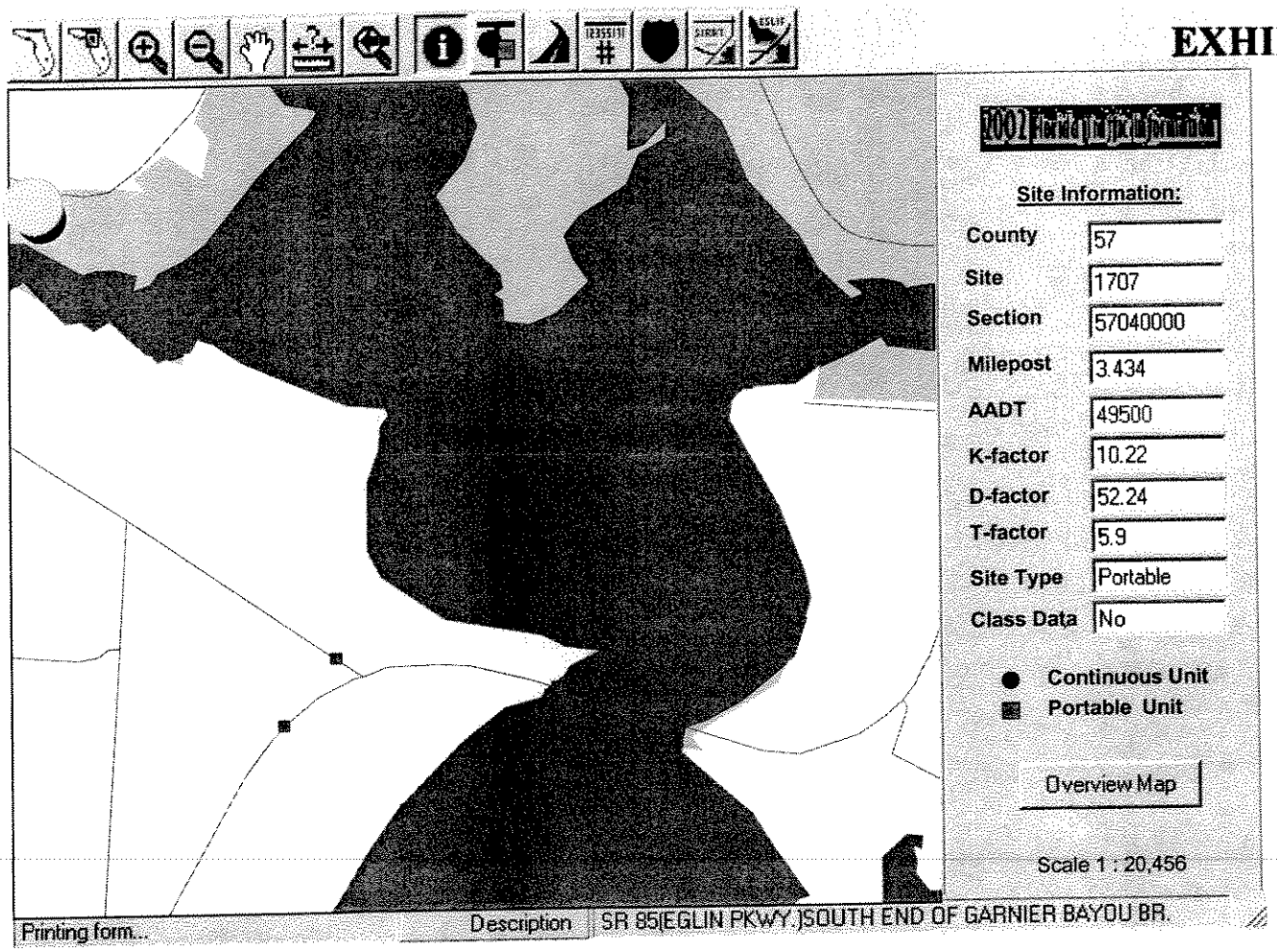
Truck Percentage 5.00 5.00 5.00

EXHIBIT B

EXHIBIT B

RICHBOURG AVE
POQUITO RD
ELGIN PKWY
S.R.188 RACETRACK RD
MOONEY ROAD
SKIPPER ST
WOODHAM ST

EXHIBIT B


Site Information:
County 57
Site 1707
Section 57040000
Milepost 3.434
AADT 49500
K-factor 10.22
D-factor 52.24
T-factor 5.9
Site Type Portable
Class Data No
Continuous Unit
Portable Unit
Overview Map
Scale 1 : 20,456
Printing form...
Description SR 85(EGLIN PKWY.)SOUTH END OF GARNIER BAYOU BR.

571707-20020701.SYN

County: 57
Station: 1707
Desciption: SR 85(EGLIN PKWY.)SOUTH END OF GARNIER BAYOU BR.
Start Date: 07/01/2002
Start Time: 0600

Time	Direction: N 1st	2nd	3rd	4th	Total	Direction: S 1st	2nd	3rd	4th	Total	Combined Total
0000	51.0	61.0	47.0	30.0	189.0	36.0	46.0	42.0	38.0	162.0	351.0
0100	26.0	28.0	27.0	39.0	120.0	32.0	13.0	22.0	22.0	89.0	209.0
0200	28.0	30.0	15.0	26.0	99.0	17.0	15.0	18.0	22.0	72.0	171.0
0300	21.0	20.0	22.0	19.0	82.0	11.0	10.0	23.0	20.0	64.0	146.0
0400	23.0	31.0	46.0	46.0	146.0	15.0	32.0	38.0	40.0	125.0	271.0
0500	39.0	74.0	114.0	152.0	379.0	49.0	65.0	112.0	138.0	364.0	743.0
0600	277.0	304.0	318.0	284.0	1183.0	186.0	263.0	317.0	350.0	1116.0	2299.0
0700	334.0	334.0	315.0	338.0	1321.0	318.0	398.0	480.0	435.0	1631.0	2952.0
0800	293.0	292.0	271.0	270.0	1126.0	398.0	363.0	408.0	375.0	1544.0	2670.0
0900	327.0	302.0	315.0	327.0	1271.0	356.0	392.0	352.0	381.0	1481.0	2752.0
1000	342.0	341.0	327.0	352.0	1362.0	440.0	390.0	422.0	430.0	1682.0	3044.0
1100	386.0	406.0	376.0	398.0	1566.0	496.0	499.0	501.0	507.0	2003.0	3569.0
1200	454.0	438.0	423.0	439.0	1754.0	465.0	418.0	464.0	414.0	1761.0	3515.0
1300	422.0	382.0	409.0	393.0	1606.0	435.0	425.0	414.0	408.0	1682.0	3288.0
1400	378.0	390.0	429.0	406.0	1603.0	388.0	408.0	439.0	408.0	1643.0	3246.0
1500	436.0	408.0	469.0	462.0	1775.0	488.0	478.0	559.0	531.0	2056.0	3831.0
1600	529.0	475.0	551.0	509.0	2064.0	544.0	563.0	571.0	563.0	2241.0	4305.0
1700	635.0	516.0	516.0	438.0	2105.0	433.0	388.0	368.0	315.0	1504.0	3609.0
1800	411.0	331.0	299.0	313.0	1354.0	323.0	317.0	273.0	284.0	1197.0	2551.0
1900	315.0	239.0	225.0	236.0	1015.0	262.0	243.0	204.0	220.0	929.0	1944.0
2000	242.0	228.0	208.0	201.0	879.0	194.0	165.0	157.0	153.0	669.0	1548.0
2100	210.0	195.0	158.0	169.0	732.0	151.0	149.0	135.0	101.0	536.0	1268.0
2200	159.0	137.0	112.0	104.0	512.0	82.0	104.0	89.0	70.0	345.0	857.0
2300	110.0	82.0	86.0	116.0	394.0	63.0	56.0	52.0	50.0	221.0	615.0
24-Hour Totals:					24637					25117	49754

Peak Volume Information

	Direction: N Hour	Volume	Direction: S Hour	Volume	Combined Directions Hour	Volume
A.M.	1145	1713	1100	2003	1115	3606
P.M.	1630	2211	1600	2241	1600	4305
Daily	1630	2211	1600	2241	1600	4305

EXHIBIT B

Print Date: April 2004

Florida Department of Transportation
Transportation Statistics Office

Annual Average Daily Traffic Report

County : 57 -- OKALOOSA

SITE	Site Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Factor	"D" Factor	"T" Factor
1707	P	SR 85(EGLIN PKWY.)SOUTH END OF GARNIER BAYOU BR.	24,500 N	25,000.00 S	49,500.00 C	10.22 F	52.24 F	5.90 F

Site type: T = Telemetered; P = Portable
AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown
"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; S = State-wide Default; W = One-Way Road
"T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; S = State-wide Default; X = Cross-Reference

EXHIBIT B

AADT FORECAST

EXHIBIT B

COUNTY: 57 **COUNTY CODE: 57**

E	DESCRIPTION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1/07	SR 85(EGLIN PKWY.)SOUTH END OF GARNIER BAYOU BR.	49,000	48,000	48,000	48,000	47,000	47,000	47,000	46,000	46,000	

4/6/2004

EXHIBIT C

EXHIBIT C

BASELINE

NO BUILD ALTERNATIVE

EXHIBIT C

Michael J. Smith
cience Applications International Corporation
500 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/05/2004
Analysis Period:	2014 - No Build
Highway:	Flordia SR 189
From/To:	2004 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin AFB Housing EIS all alternative - SR 85 to Mooney Rd

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2151	vph	1967	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	604		507	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1232	pcphpl	1034	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1232	pcphpl	1034	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	54.0	mph	54.0	mph
Level of service, LOS	C		C	
Density, D	22.8	pc/mi/ln	19.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
500 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/05/04
Analysis Period:	2019 - No Build
Highway:	Flordia SR 189
From/To:	2004 to 2019
Jurisdiction:	Flordia
Analysis Year:	2002
Project ID:	Eglin AFB Housing EIS all alternative - SR 85 to Mooney Rd

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2366	vph	2163	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	665		557	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1355	pcphpl	1137	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1355	pcphpl	1137	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	54.0	mph	54.0	mph
Level of service, LOS	C		C	
Density, D	25.1	pc/mi/ln	21.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
500 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/05/04
Analysis Period:	2014 - No Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alternatives No Build SR 85

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1307	vph	1195	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	403		325	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	822	pcphpl	662	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	822	pcphpl	662	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	13.9	pc/mi/ln	11.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
300 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4.05/04
Analysis Period:	2019 - No Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alternatives No Build SR 85

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1405	vph	1285	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	434		349	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	884	pcphpl	712	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	884	pcphpl	712	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	15.0	pc/mi/ln	12.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

ichael J. Smith
cience Applications International Corporation
500 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/1/2004
Analysis Period:	2014 - No Build
Highway:	SR 189 south of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	710	vph	649	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	211		189	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	431	pcphpl	384	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	431	pcphpl	384	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	7.3	pc/mi/ln	6.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS2000: Multilane Highways Release 4.1d

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
500 Northwest Plaza
Suite 1000
St. Ann Missouri 63074
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/1/2004
Analysis Period:	2019 - No Build
Highway:	SR 189 south of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	746	vph	682	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	222		198	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	452	pcphpl	404	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	452	pcphpl	404	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	7.7	pc/mi/ln	6.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

ALTERNATIVE ONE

POQUITO BAYOU AREA

TRAFFIC ANALYSES OF ALTERNATIVE ONE
POQUITO BAYOU EXPANSION
TRAFFIC CAN ACCESS EITHER SR 189 OR SR 85 OR BOTH

SCENARIO 1 - ASSUME ALL TRAFFIC FROM AREA USES SR 189

EXISTING TRAFFIC ON SECTION OF 189 BETWEEN MOODY DRIVE AND 52
INFORMATION COLLECTED BY FL DOT AT MILEPOST 3.714

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER VOLUME DIRECTION - FOR PM RUSH ASSUME OUT OF CITY (EAST) DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER VOLUME SIDE OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION
ASSUME 67% OF TRIPS ENTERING ARE FROM EGLIN DIRECTION, 33% ARE FROM HURLBERT DIRECTION
84% OF THE MILITARY PERSONNEL TRIPS ARE FROM EGLIN, BUT DEPENDANTS TRIPS WOULD BE ASSUMED TO FOLLOW EXISTING TRAFFIC PATTERN. ASSUME EXITING TRAFFIC FOLLOWS EXISTING TRAFFIC PATTERN. SINCE EXISTING PATTERN IS 52 48, USE 67 - 33 SPLIT.

				east	west					
POQUITO BAYOU	3/acre	entering	917	303	614		303	614	303	614
		exiting	516	270	246	worst case	270	246	270	246
	4/acre	entering	903	298	605					
		exiting	508	265	243					
	6/acre	entering	875	289	586					
		exiting	492	257	235					

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME AN ADDITION OF 25% FOR MILITARY COMMUTERS OVER TRIP GENERATION BASELINE. 143 215 143 215

SUB TOTAL ADD		**715**	**1,076**	**715**	**1,076**
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	**3/acre**	**2,867**	**3,043**	**3,283**	**3,239**
DESIGN PEAK HOUR	**4/acre**	**2,856**	**3,026**	**3,070**	**3,223**
DESIGN PEAK HOUR	**6/acre**	**2,834**	**2,993**	**3,048**	**3,190**

EXHIBIT C

EXHIBIT C

Michael J. Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 3 units/ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2867	vph	3043	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	805		784	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1642	pcphpl	1599	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1642	pcphpl	1599	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.0	mph	53.3	mph
Level of service, LOS	D		D	
Density, D	31.0	pc/mi/ln	30.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 4 units/ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2856	vph	3026	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	802		780	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1636	pcphpl	1590	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1636	pcphpl	1590	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.1	mph	53.3	mph
Level of service, LOS	D		D	
Density, D	30.8	pc/mi/ln	29.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Michael J. Smith
Science Applications International Corporation
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Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 6 units/ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2834	vph	2993	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	796		771	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1623	pcphpl	1573	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1623	pcphpl	1573	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.1	mph	53.4	mph
Level of service, LOS	D		D	
Density, D	30.5	pc/mi/ln	29.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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Phone: 314 770 3022 Fax: 314 344 4349
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3283	vph	3239	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	922		835	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1881	pcphpl	1702	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1881	pcphpl	1702	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	51.6	mph	52.7	mph
Level of service, LOS	E		D	
Density, D	36.4	pc/mi/ln	32.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Michael J. Smith
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OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3070	vph	3223	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	862		831	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1759	pcphpl	1694	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1759	pcphpl	1694	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.4	mph	52.8	mph
Level of service, LOS	D		D	
Density, D	33.6	pc/mi/ln	32.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - all traffic SR 189 - 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3048	vph	3190	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	856		822	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1746	pcphpl	1677	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1746	pcphpl	1677	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.5	mph	52.9	mph
Level of service, LOS	D		D	
Density, D	33.3	pc/mi/ln	31.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SCENARIO 2 - ASSUME ALL EGLIN TRAFFIC USES SR 85

EXISTING TRAFFIC ON SR 85
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2002			2007	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	HS DHV	LS DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/5	D*(1+H)^12			D*(1+H)^17		
	19900	10.22	52.24	1947	1017	930	22000	2.11%	2502	1307	1195	2690	1405	1285

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

NEW HOUSING - NEW TRIPS GENERATED
ASSUME 67% OF ENTERING TRIPS ARE FROM EGLIN

POQUITO BAYOU	3/acre	entering	917	303	614		303	614	303	614
		exiting	516	270	246	worst case	270	246	270	246
	4/acre	entering	903	298	605					
		exiting	508	265	243					
	6/acre	entering	875	289	586					
		exiting	492	257	235					

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER 143 215 143 215
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

SUB TOTAL ADD		715	1,076	715	1,076
		BUILD 2014		BUILD 2019	
DESIGN PEAK HOUR	**3/acre**	2,022	2,271	2,121	2,361
DESIGN PEAK HOUR	**4/acre**	2,011	2,254	2,110	2,344
DESIGN PEAK HOUR	**6/acre**	1,989	2,221	2,088	2,311

EXHIBIT C

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Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 3 units acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2022	vph	2271	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	624		617	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1273	pcphpl	1258	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1273	pcphpl	1258	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	21.6	pc/mi/ln	21.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 4 units acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2011	vph	2254	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	621		612	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1266	pcphpl	1249	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1266	pcphpl	1249	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	21.5	pc/mi/ln	21.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 6 units acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1989	vph	2221	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	614		604	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1252	pcphpl	1231	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1252	pcphpl	1231	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	21.2	pc/mi/ln	20.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2121	vph	2361	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	655		642	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1335	pcphpl	1308	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1335	pcphpl	1308	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.6	pc/mi/ln	22.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Science Applications International Corporation
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2110	vph	2344	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	651		637	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1328	pcphpl	1299	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1328	pcphpl	1299	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.5	pc/mi/ln	22.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, all to SR 85, 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2088	vph	2311	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	644		628	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1314	pcphpl	1281	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1314	pcphpl	1281	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.3	pc/mi/ln	21.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SCENARIO 3 - ASSUME ALL TRAFFIC FROM EGLIN SPLITS 50/50 BETWEEN SR 85 AND SR 189

EXISTING TRAFFIC ON SECTION OF 189 BETWEEN MOODY DRIVE AND 52
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER SIDE DIRECTION OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION
ASSUME 67% OF TRIPS ENTERING ARE FROM EGLIN

POQUITO BAYOU	3/acre	entering	917	151	383	151	383	151	383
		exiting	516	135	191	135	191	135	191
	4/acre	entering	903	149	377				
		exiting	508	133	188				
	6/acre	entering	875	144	365				
		exiting	492	129	182				

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

		72	143	72	143
SUB TOTAL ADD		**358**	**717**	**358**	**717**
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	**3/acre**	**2,509**	**2,684**	**2,724**	**2,880**
DESIGN PEAK HOUR	**4/acre**	**2,503**	**2,673**	**2,718**	**2,869**
DESIGN PEAK HOUR	**6/acre**	**2,492**	**2,651**	**2,707**	**2,847**

EXHIBIT C

EXISTING TRAFFIC ON SR 85
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2002			2007	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	HS DHV	LS DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/5	D*(1+H)^12			D*(1+H)^17		
	19900	10.22	52.24	1947	1017	930	22000	2.11%	2502	1307	1195	2690	1405	1285

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

NEW HOUSING - NEW TRIPS GENERATED
ASSUME 67% OF ENTERING TRIPS ARE FROM EGLIN

POQUITO BAYOU	3/acre	entering	917	151	383	151	383
		exiting	516	135	191 worst case	135	191
	4/acre	entering	903	149	377		
		exiting	508	133	188		
	6/acre	entering	875	144	365		
		exiting	492	129	182		

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

SUB TOTAL ADD		286	573	286	573
		BUILD 2014		BUILD 2019	
DESIGN PEAK HOUR	3/acre	1,665	1,912	1,763	2,002
DESIGN PEAK HOUR	4/acre	1,659	1,901	1,758	1,991
DESIGN PEAK HOUR	6/acre	1,648	1,879	1,747	1,969

EXHIBIT C

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst: Michael J. Smith
Agency/Co: SAIC
Date: 11/02/04
Analysis Period: 2014 - Build
Highway: Flordia SR 189
From/To: 2014 to 2019
Jurisdiction: Flordia
Analysis Year: 2004
Project ID: Eglin EIS alt 1 - ~~all~~ 50% mgs to SR 189 - 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2509	vph	2684	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	705		692	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1437	pcphpl	1411	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1437	pcphpl	1411	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.9	mph	54.0	mph
Level of service, LOS	D		D	
Density, D	26.7	pc/mi/ln	26.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
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E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - ~~all~~ 50% mds to SR 189 - 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2503	vph	2673	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	703		689	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1434	pcphpl	1405	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1434	pcphpl	1405	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.9	mph	54.0	mph
Level of service, LOS	D		D	
Density, D	26.6	pc/mi/ln	26.0+	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - ~~all~~ 50% mgf to SR 189 - 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2492	vph	2651	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	700		683	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1428	pcphpl	1393	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1428	pcphpl	1393	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.9	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	26.5	pc/mi/ln	25.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - 50% SR 189 - 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2724	vph	2880	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	765		742	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1560	pcphpl	1514	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1560	pcphpl	1514	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.4	mph	53.6	mph
Level of service, LOS	D		D	
Density, D	29.2	pc/mi/ln	28.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - 50% SR 189 - 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2718	vph	2869	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	763		739	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1557	pcphpl	1508	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1557	pcphpl	1508	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.5	mph	53.7	mph
Level of service, LOS	D		D	
Density, D	29.1	pc/mi/ln	28.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 1 - 50% SR 189 - 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2707	vph	2847	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	760		734	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1551	pcphpl	1496	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1551	pcphpl	1496	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.5	mph	53.7	mph
Level of service, LOS	D		D	
Density, D	29.0	pc/mi/ln	27.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1665	vph	1912	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	514		520	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1048	pcphpl	1059	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1048	pcphpl	1059	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.8	pc/mi/ln	17.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Michael J Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1659	vph	1901	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	512		517	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1044	pcphpl	1053	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1044	pcphpl	1053	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.7	pc/mi/ln	17.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Michael J Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1648	vph	1879	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	509		511	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1037	pcphpl	1041	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1037	pcphpl	1041	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.6	pc/mi/ln	17.6	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
8421 St. John Industrial Drive
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St. John, MO 63114
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Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1763	vph	2002	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	544		544	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1110	pcphpl	1109	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1110	pcphpl	1109	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	18.8	pc/mi/ln	18.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
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Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1758	vph	1991	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	543		541	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1106	pcphpl	1103	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1106	pcphpl	1103	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	18.7	pc/mi/ln	18.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Science Applications International Corporation
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Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 1, 50% to SR 85, 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1747	vph	1969	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	539		535	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1099	pcphpl	1091	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1099	pcphpl	1091	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	18.6	pc/mi/ln	18.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

ALTERNATIVE TWO

EGLIN MAIN BASE AREA

TRAFFIC ANALYSES OF ALTERNATIVE TWO
TRAFFIC WILL AFFECT HIGHWAY 189, LOOK AT SECTIONS ON EACH SIDE OF SR 85

SECTION OF 189 BETWEEN 52 AND SR 389

INFORMATION COLLECTED BY FL DOT AT MILEPOST 5.816

2002						2007	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
A	B	C	D	E	F	G	H	I	J	K	L	M	N
			A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
11800	10.22	52.24	1206	**630**	**576**	11800	1.00%	1359	**710**	**649**	1428	**746**	**682**
							(ASSUMED)						

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION,
ASSUME 315 UNITS WILL BE ASSOCATED WITH HURLBERT FIELD
THE UNITS IN THE SOUTHSIDE MANOR WOULD BE UTILIZED FIRST, THE REMAINING UNITS WOULD BE PLACED ON EGLIN

143	**80**
125	**71**
90	**51**

NEW HOUSING - NEW TRIPS GENERATED
ASSUME ALL ENTERING TRIPS ARE HEARING EAST, ALL EXITING TRIPS ARE HEADING WEST.

			EAST	WEST					
3/acre	entering	143	143	0	143	0	143	0	
	exiting	80	0	80	0	80	0	80	
4/acre	entering	125	125	0					
	exiting	71	0	71					
6/acre	entering	90	90	0					
	exiting	51	0	51					

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A NET REDUCTION OF 90 UNITS ON EGLIN MAIN BASE - ASSUME NO AFFECT TO EXISTING TRAFFIC
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE. 36 20 36 20
ASSUME EGLIN MILITARY COMMUTERS WILL NOT LEAVE BASE - REDUCE ENTERING TRIPS BY 67%

SUB TOTAL ADD	**179**	**100**	**179**	**100**
	BUILD 2014		**BUILD 2019**	

EXHIBIT C

DESIGN PEAK HOUR	3/acre	889	749	925	782
DESIGN PEAK HOUR	4/acre	867	737	903	770
DESIGN PEAK HOUR	6/acre	822	712	859	745

TRAFFIC ANALYSES OF ALTERNATIVE TWO

THIS ALTERNATIVE WILL ALSO AFFECT SR 189 PAST THE SR 85 INTERSECTION

ASSUME SAME NET CHANGE IN TRAFFIC OCCURS ON THE SECTION OF ROADWAY

EXISTING TRAFFIC ON SECTION OF 189 BETWEEN MOODY DRIVE AND 52
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

		BUILD 2014		BUILD 2019	
DESIGN PEAK HOUR	3/acre	2,330	2,067	2,545	2,263
DESIGN PEAK HOUR	4/acre	2,308	2,055	2,523	2,251
DESIGN PEAK HOUR	6/acre	2,264	2,030	2,479	2,226

EXHIBIT C

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Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Build 2014 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	889	vph	749	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	265		218	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	539	pcphpl	444	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	539	pcphpl	444	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	9.1	pc/mi/ln	7.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS alt 2 - Build 2014 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	867	vph	737	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	258		214	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	526	pcphpl	437	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	526	pcphpl	437	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	8.9	pc/mi/ln	7.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS alt 2 - Build 2014 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	822	vph	712	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	245		207	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	499	pcphpl	422	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	499	pcphpl	422	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	8.5	pc/mi/ln	7.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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St. John, MO 63114
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E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 2 SR 189 South of SR 85 3 units /ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	925	vph	782	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	275		227	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	561	pcphpl	463	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	561	pcphpl	463	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	9.5	pc/mi/ln	7.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
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Suite 200
St. John, MO 63114
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Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 2 SR 189 South of SR 85 4 units /ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	903	vph	770	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	269		224	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	548	pcphpl	456	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	548	pcphpl	456	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	9.3	pc/mi/ln	7.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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Suite 200
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Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 2 SR 189 South of SR 85 6 units /ac

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	859	vph	745	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	256		217	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	521	pcphpl	441	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	521	pcphpl	441	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	8.8	pc/mi/ln	7.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2014 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2330	vph	2067	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	654		533	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1335	pcphpl	1086	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1335	pcphpl	1086	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.6	pc/mi/ln	18.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2014 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2308	vph	2055	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	648		530	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1322	pcphpl	1080	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1322	pcphpl	1080	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.4	pc/mi/ln	18.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Science Applications International Corporation
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OPERATIONAL ANALYSIS

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Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2014, 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2264	vph	2030	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	636		523	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1297	pcphpl	1067	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1297	pcphpl	1067	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.0	pc/mi/ln	18.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
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Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
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Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2019, 3 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2545	vph	2263	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	715		583	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1458	pcphpl	1189	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1458	pcphpl	1189	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	58.8	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	24.8	pc/mi/ln	20.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Michael J Smith
Science Applications International Corporation
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E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2019, 4 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2523	vph	2251	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	709		580	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1445	pcphpl	1183	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1445	pcphpl	1183	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	58.9	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	24.5	pc/mi/ln	20.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2019 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alt Build 2019, 6 units per acre

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2479	vph	2226	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	696		574	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1420	pcphpl	1170	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1420	pcphpl	1170	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	24.1	pc/mi/ln	19.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 North of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alternatives No Build SR 85

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2330	vph	2067	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	654		533	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1335	pcphpl	1086	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1335	pcphpl	1086	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		C	
Density, D	22.6	pc/mi/ln	18.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	SR 189 South of SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS all alternatives No Build SR 85

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	889	vph	749	vph
Peak-hour factor, PHF	0.84		0.86	
Peak 15-minute volume, v15	265		218	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	539	pcphpl	444	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	539	pcphpl	444	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	A		A	
Density, D	9.1	pc/mi/ln	7.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

ALTERNATIVES THREE AND FOUR

POQUITO BAYOU AREA
AND
CAMP PINCHOT AREA

TRAFFIC ANALYSES OF ALTERNATIVES THREE AND FOUR
Camp Pinchot and Poquito Bayou Expansion
CAMP PINCHOT TRAFFIC WILL USE HIGHWAY 189,
POQUITO BAYOU CAN EITHER USE HIGHWAY 189, HIGHWAY 50, OR SPLIT BETWEEN THE TWO.

NEW HOUSING - NEW TRIPS GENERATED

					east	west
Camp Pinchot		3/acre	entering	376	196	180
			exiting	212	111	101
		4/acre	entering	488	255	233
			exiting	274	143	131
		6/acre	entering	703	367	336
			exiting	395	206	189
Poquito Bayou		3/acre	entering	603	315	288
			exiting	339	177	162
		4/acre	entering	480	251	229
			exiting	270	141	129
		6/acre	entering	221	115	106
			exiting	124	65	59

EXHIBIT C

SCENARIO 1 - ASSUME ALL POQUITO BAYOU TRAFFIC WILL USE SR 189

CAMP PINCHOT TRAFFIC WILL ALSO USE HIGHWAY 189

SECTION OF 189 BETWEEN 52 AND SR 389

INFORMATION COLLECTED BY FL DOT AT MILEPOST 5.816

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
FORMULA				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC

K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT

D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

HS DHV IS TRAFFIC GOING IN HIGHER VOLUME DIRECTION - FOR PM RUSH ASSUME OUT OF CITY (EAST) DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER VOLUME SIDE OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION

		east	west					
POQUITO B	3/acre	799	731	worst case	799	731	799	731
	4/acre	790	722					
	6/acre	754	689					

ASSUMPTIONS ABOUT THIS ALTERNATIVE

A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC

ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.

ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER

ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE. 200 183 200 183

SUB TOTAL ADD		**999**	**913**	**999**	**913**
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	**3/acre**	**3,150**	**2,880**	**3,365**	**3,076**
DESIGN PEAK HOUR	**4/acre**	**3,139**	**2,870**	**3,353**	**3,066**
DESIGN PEAK HOUR	**6/acre**	**3,094**	**2,828**	**3,308**	**3,025**

EXHIBIT C

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 3 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3150	vph	2880	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	885		742	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1805	pcphpl	1514	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1805	pcphpl	1514	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.1	mph	53.6	mph
Level of service, LOS	D		D	
Density, D	34.6	pc/mi/ln	28.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

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Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 4 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3139	vph	2870	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	882		740	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1798	pcphpl	1508	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1798	pcphpl	1508	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.2	mph	53.7	mph
Level of service, LOS	D		D	
Density, D	34.5	pc/mi/ln	28.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
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Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 6 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3094	vph	2828	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	869		729	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1772	pcphpl	1486	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1772	pcphpl	1486	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.3	mph	53.8	mph
Level of service, LOS	D		D	
Density, D	33.9	pc/mi/ln	27.6	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
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OPERATIONAL ANALYSIS

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Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 3 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3365	vph	3076	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	945		793	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1928	pcphpl	1617	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1928	pcphpl	1617	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	51.3	mph	53.2	mph
Level of service, LOS	E		D	
Density, D	37.6	pc/mi/ln	30.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 4 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3353	vph	3066	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	942		790	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1921	pcphpl	1612	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1921	pcphpl	1612	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	51.4	mph	53.2	mph
Level of service, LOS	E		D	
Density, D	37.4	pc/mi/ln	30.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS alt 3 & 4 - all PB SR189 - 6 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3308	vph	3025	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	929		780	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1895	pcphpl	1590	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1895	pcphpl	1590	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	51.5	mph	53.3	mph
Level of service, LOS	E		D	
Density, D	36.8	pc/mi/ln	29.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SCENARIO 2 - ASSUME ALL POQUITO BAYOU TRAFFIC ON TO SR 85

EXISTING TRAFFIC ON SR 85
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2002			2007	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	HS DHV	LS DHV
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
FORMULA				A*B	D*C	D-E		((G-A)/A)/5	D*(1+H)^12			D*(1+H)^17		
	19900	10.22	52.24	1947	1017	930	22000	2.11%	2502	1307	1195	2690	1405	1285

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

NEW HOUSING - NEW TRIPS GENERATED

			EAST	WEST						
POQUITO BAYOU	3/acre	3/acre	492	450						
	4/acre	4/acre	392	358						
	6/acre	6/acre	180	165	worst case	180	165		180	165

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
315 UNITS (16%) OCCUPIED BY HURLBERT MILITARY COMMUTERS
1649 UNITS (84%) OCCUPIED BY EGLIN MILITARY COMMUTERS
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER — 45 / 41 / 45 / 41
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

SUB TOTAL ADD		**225**	**206**	**225**	**206**
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	**3/acre**	**1,922**	**1,757**	**2,021**	**1,847**
DESIGN PEAK HOUR	**4/acre**	**1,797**	**1,643**	**1,895**	**1,733**
DESIGN PEAK HOUR	**6/acre**	**1,532**	**1,401**	**1,631**	**1,491**

EXHIBIT C

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1922	vph	1757	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	593		477	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1210	pcphpl	973	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1210	pcphpl	973	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		B	
Density, D	20.5	pc/mi/ln	16.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 4 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1797	vph	1643	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	555		446	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1131	pcphpl	910	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1131	pcphpl	910	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		B	
Density, D	19.2	pc/mi/ln	15.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Michael J Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

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Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 6 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1532	vph	1401	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	473		381	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	964	pcphpl	776	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	964	pcphpl	776	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	16.3	pc/mi/ln	13.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	2021	vph	1847	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	624		502	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1272	pcphpl	1023	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1272	pcphpl	1023	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		B	
Density, D	21.6	pc/mi/ln	17.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 4 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1895	vph	1733	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	585		471	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1193	pcphpl	960	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1193	pcphpl	960	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		B	
Density, D	20.2	pc/mi/ln	16.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
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OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 2, all PB SR 85, 6 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1631	vph	1491	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	503		405	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1026	pcphpl	826	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1026	pcphpl	826	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.4	pc/mi/ln	14.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SCENARIO 2 ALT 3,4

SR 189

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER SIDE DIRECTION OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION
ASSUME 67% OF TRIPS ENTERING ARE FROM EGLIN

CAMP PINCHOT	3/acre	3/acre	307	281		
	4/acre	4/acre	398	364		
	6/acre	6/acre	574	524	worst case	574	524	574	524

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
315 UNITS (16%) OCCUPIED BY HURLBERT MILITARY COMMUTERS
1649 UNITS (84%) OCCUPIED BY EGLIN MILITARY COMMUTERS
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE. 143 131 143 131

SUB TOTAL ADD		2,868	2,622	3,083	2,819
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	3/acre	2,535	2,318	2,750	2,514
DESIGN PEAK HOUR	4/acre	2,649	2,422	2,864	2,618
DESIGN PEAK HOUR	6/acre	2,868	2,622	3,083	2,819

EXHIBIT C

Michael J. Smith
cience Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 3 - Scenario 2 - all PB to SR 85 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2535	vph	2318	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	782		630	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1596	pcphpl	1284	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1596	pcphpl	1284	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.3	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	30.0	pc/mi/ln	23.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/02/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 3 - Scenario 2 - all PB to SR 85 4 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2649	vph	2422	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	818		658	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1667	pcphpl	1342	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1667	pcphpl	1342	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.9	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	31.5	pc/mi/ln	24.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2868	vph	2622	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	885		712	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1805	pcphpl	1453	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1805	pcphpl	1453	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.1	mph	53.9	mph
Level of service, LOS	D		D	
Density, D	34.6	pc/mi/ln	27.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Suite 200
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From/To:	2014 to 2019
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Project ID:	Eglin EIS Alt 3 - Scenario 2 - all PB to SR 85 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2750	vph	2514	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	849		683	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1731	pcphpl	1393	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1731	pcphpl	1393	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.6	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	32.9	pc/mi/ln	25.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2864	vph	2618	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	884		711	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1803	pcphpl	1451	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1803	pcphpl	1451	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.1	mph	53.9	mph
Level of service, LOS	D		D	
Density, D	34.6	pc/mi/ln	26.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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Suite 200
St. John Missouri 63114
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E-mail: smmic@saic.com

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Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 3 - Scenario 2 - all PB to SR 85 6 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3083	vph	2819	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	952		766	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1941	pcphpl	1562	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1941	pcphpl	1562	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	51.2	mph	53.4	mph
Level of service, LOS	E		D	
Density, D	37.9	pc/mi/ln	29.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SCENARIO 3 - ASSUME ALL TRAFFIC FROM POQUITO BAYOU SPLITS 50/50 BETWEEN SR 85 AND SR 189

EXISTING TRAFFIC ON SECTION OF 189 BETWEEN MOODY DRIVE AND 52
INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER SIDE DIRECTION OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION
ASSUME 67% OF TRIPS ENTERING ARE FROM EGLIN
POQUITO BAYOU

	EAST	WEST
3/acre	553	506
4/acre	594	543
6/acre	664	607

ASSUMPTIONS ABOUT THIS ALTERNATIVE
A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC
315 UNITS (16%) OCCUPIED BY HURLBERT MILITARY COMMUTERS
1649 UNITS (84%) OCCUPIED BY EGLIN MILITARY COMMUTERS
ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.
ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER
ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

			138	126	138	126
		SUB TOTAL ADD	2,843	2,599	3,057	2,795
			BUILD 2014		BUILD 2019	
DESIGN PEAK HOUR	3/acre		2,843	2,658	3,057	2,855
DESIGN PEAK HOUR	4/acre		2,894	2,709	3,108	2,906
DESIGN PEAK HOUR	6/acre		2,981	2,796	3,196	2,993

EXHIBIT C

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HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	~~Flordia SR 189~~
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 3 - PB split model for SR 189 3 UNITS/AC

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2843	vph	2658	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	799		685	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1629	pcphpl	1397	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1629	pcphpl	1397	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.1	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	30.7	pc/mi/ln	25.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2894	vph	2709	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	813		698	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1658	pcphpl	1424	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1658	pcphpl	1424	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.0	mph	54.0	mph
Level of service, LOS	D		D	
Density, D	31.3	pc/mi/ln	26.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2981	vph	2796	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	837		721	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1708	pcphpl	1470	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1708	pcphpl	1470	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.7	mph	53.8	mph
Level of service, LOS	D		D	
Density, D	32.4	pc/mi/ln	27.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3057	vph	2855	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	859		736	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1751	pcphpl	1501	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1751	pcphpl	1501	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.4	mph	53.7	mph
Level of service, LOS	D		D	
Density, D	33.4	pc/mi/ln	28.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 3 - PB split model for SR 189 4 UNITS/AC

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3108	vph	2906	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	873		749	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1780	pcphpl	1527	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1780	pcphpl	1527	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.3	mph	53.6	mph
Level of service, LOS	D		D	
Density, D	34.1	pc/mi/ln	28.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

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Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

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Project ID:	Eglin EIS Alt 3 - PB split model for SR 189 6 UNITS/AC

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3196	vph	2993	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	898		771	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1831	pcphpl	1573	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1831	pcphpl	1573	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.0	mph	53.4	mph
Level of service, LOS	E		D	
Density, D	35.2	pc/mi/ln	29.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Scenario 3 Alt 3, 4

SR 85

INFORMATION COLLECT BY FL DOT AT MILEPOST 3.714

	2002			2002			2007	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	HS DHV	LS DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/5	D*(1+H)^12			D*(1+H)^17		
	19900	10.22	52.24	1947	1017	930	22000	2.11%	2502	1307	1195	2690	1405	1285

AADT IS ANNUAL AVERAGE DAILY TRAFFIC

K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT

D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

NEW HOUSING - NEW TRIPS GENERATED

ASSUME 67% OF ENTERING TRIPS ARE FROM EGLIN

POQUITO BAYOU

3/acre	246	225
4/acre	196	179
6/acre	90	82

ASSUMPTIONS ABOUT THIS ALTERNATIVE

A REDUCTION OF 2,049 UNITS ON EGLIN MAIN BASE - ASSUME NO EFFECT TO EXISTING TRAFFIC

315 UNITS (16%) OCCUPIED BY HURLBERT MILITARY COMMUTERS

1649 UNITS (84%) OCCUPIED BY EGLIN MILITARY COMMUTERS

ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.

ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER

ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

246	225		246	225	
62	56		62	56	
SUB TOTAL ADD		1,614	1,476	1,713	1,566
		BUILD 2014		BUILD 2019	
DESIGN PEAK HOUR	3/acre	1,614	1,476	1,713	1,566
DESIGN PEAK HOUR	4/acre	1,552	1,419	1,602	1,785
DESIGN PEAK HOUR	6/acre	1,420	1,298	1,518	1,388

EXHIBIT C

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1614	vph	1476	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	498		401	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1016	pcphpl	818	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1016	pcphpl	818	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.2	pc/mi/ln	13.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

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Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 4 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1552	vph	1419	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	479		386	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	977	pcphpl	786	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	977	pcphpl	786	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	16.6	pc/mi/ln	13.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
Phone: 314-770-3022 Fax: 314-344-4349
E-mail: smmic@saic.com

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Analysis Period:	2014 - Build
Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 6 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1420	vph	1298	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	438		353	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	894	pcphpl	719	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	894	pcphpl	719	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	15.2	pc/mi/ln	12.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Michael J Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John, MO 63114
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Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 3 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1713	vph	1566	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	529		426	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1078	pcphpl	868	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1078	pcphpl	868	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	C		B	
Density, D	18.3	pc/mi/ln	14.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Science Applications International Corporation
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Phone: 314-770-3022 Fax: 314-344-4349
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Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 4 UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1602	vph	1785	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	494		485	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1008	pcphpl	989	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1008	pcphpl	989	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	17.1	pc/mi/ln	16.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

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Science Applications International Corporation
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Highway:	SR 85
From/To:	
Jurisdiction:	Okaloosa County, Flordia
Analysis Year:	2004
Project ID:	Military Housing EIS Alt 3 S 3, all PB SPLIT, 6UNITS ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	59.0	mph	59.0	mph

VOLUME

Direction	1		2	
Volume, V	1518	vph	1388	vph
Peak-hour factor, PHF	0.81		0.92	
Peak 15-minute volume, v15	469		377	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	955	pcphpl	769	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	955	pcphpl	769	pcphpl
Free-flow speed, FFS	59.0	mph	59.0	mph
Avg. passenger-car travel speed, S	59.0	mph	59.0	mph
Level of service, LOS	B		B	
Density, D	16.2	pc/mi/ln	13.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

ALTERNATIVES FIVE AND SIX

EGLIN MAIN BASE AREA
AND
CAMP PINCHOT AREA

TRAFFIC ANALYSES OF ALTERNATIVES FIVE AND SIX

Camp Pinchot and Eglin Main Base

Assumed Eglin Main Base - which is a reduction will not not have an affect

Camp Pinchot affects SR 189 north of intersection with SR 85

EXISTING TRAFFIC ON SECTION OF 189 BETWEEN MOODY DRIVE AND 52

INFORMATION COLLECTED BY FL DOT AT MILEPOST 3.714

	2002			2003			2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
	AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	EAST DHV	WEST DHV	DHV	EAST DHV	WEST DHV
FORMULA	A	B	C	D	E	F	G	H	I	J	K	L	M	N
				A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
	33500	10.22	52.24	3278	1712	1566	38000	1.92%	4118	2151	1967	4529	2366	2163

AADT IS ANNUAL AVERAGE DAILY TRAFFIC

K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT

D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC

HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION, LS DHV IS TRAFFIC GOING IN LOWER SIDE DIRECTION OF ROADWAY

NEW HOUSING - NEW TRIPS GENERATED PER TRIP GENERATION

Camp Pinchot	3/acre	entering	376	196	180				
		exiting	212	111	101				
	4/acre	entering	488	255	233				
		exiting	274	143	131				
	6/acre	entering	703	367	336	worst case	367	336	367	336
		exiting	395	206	189		206	189	206	189
Main Base	3/acre	entering	0	0	0				
		exiting	0	0	0				
	4/acre	entering	0	0	0				
		exiting	0	0	0				
	6/acre	entering	0	0	0				
		exiting	0	0	0				

ASSUMPTIONS ABOUT THIS ALTERNATIVE

A NET REDUCTION OF 700 UNITS ON EGLIN MAIN BASE - ASSUME NO AFFECT TO EXISTING TRAFFIC

315 UNITS (45%) AT CAMP PINCHOT OCCUPIED BY HURLBERT MILITARY COMMUTERS

ALL REMAINING UNITS (55%) ARE OCCUPIED BY EGLIN MILITARY COMMUTERS

ASSUME ALL MILITARY PERSONNEL WORK MORE REGIMENTED SCHEDULES THAN CIVILIANS.

ASSUME ONE MILITARY COMMUTER PER UNIT AND ONE VEHICLE PER MILITARY COMMUTER

ASSUME 25% OF MILITARY COMMUTERS NOT ACCOUNTED IN TRIP GENERATION BASELINE.

ASSUME EGLIN MILITARY COMMUTERS WILL NOT LEAVE BASE - REDUCE ENTERING TRIPS BY 67%

		0	0	0	0
SUB TOTAL ADD		**574**	**524**	**574**	**524**
		BUILD 2014		**BUILD 2019**	
DESIGN PEAK HOUR	**3/acre**	**2,535**	**2,318**	**2,750**	**2,514**
DESIGN PEAK HOUR	**4/acre**	**2,649**	**2,462**	**2,864**	**2,618**
DESIGN PEAK HOUR	**6/acre**	**2,868**	**2,622**	**3,083**	**2,819**

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	1/19/05
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 3 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2535	vph	2318	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	712		597	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1452	pcphpl	1218	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1452	pcphpl	1218	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.9	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	27.0	pc/mi/ln	22.6	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	01/24/05
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 3 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2750	vph	2514	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	772		648	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1575	pcphpl	1321	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1575	pcphpl	1321	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.4	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	29.5	pc/mi/ln	24.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/08/04
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 4 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2649	vph	2475	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	744		638	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1517	pcphpl	1301	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1517	pcphpl	1301	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.6	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	28.3	pc/mi/ln	24.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	01/24/05
Analysis Period:	2019 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 4 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2864	vph	2618	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	804		675	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1641	pcphpl	1376	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1641	pcphpl	1376	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.0	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	30.9	pc/mi/ln	25.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	1/19/05
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 6 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	2868	vph	2622	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	806		676	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1643	pcphpl	1378	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1643	pcphpl	1378	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	53.0	mph	54.0	mph
Level of service, LOS	D		C	
Density, D	31.0	pc/mi/ln	25.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J. Smith
Science Applications International Corporation
8421 St. John Industrial Drive
Suite 200
St. John Missouri 63114
Phone: 314 770 3022 Fax: 314 344 4349
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	1/19/05
Analysis Period:	2014 - Build
Highway:	Flordia SR 189
From/To:	2014 to 2019
Jurisdiction:	Flordia
Analysis Year:	2004
Project ID:	Eglin EIS Alt 5 and 6 - 6 UNITS PER ACRE

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	4		4	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	55.0	mph	55.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.0	mph	1.0	mph
Free-flow speed	54.0	mph	54.0	mph

VOLUME

Direction	1		2	
Volume, V	3083	vph	2819	vph
Peak-hour factor, PHF	0.89		0.97	
Peak 15-minute volume, v15	866		727	
Trucks and buses	4	%	4	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.980		0.980	
Flow rate, vp	1766	pcphpl	1482	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1766	pcphpl	1482	pcphpl
Free-flow speed, FFS	54.0	mph	54.0	mph
Avg. passenger-car travel speed, S	52.3	mph	53.8	mph
Level of service, LOS	D		D	
Density, D	33.7	pc/mi/ln	27.6	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HURLBERT FIELD

SOUNDSIDE MANOR

TRAFFIC ANALYSES OF HURLBERT GATES
ALL Alternatives
ASSUME 315 NEW TRIPS AT PEAK HOUR.
HURLBERT MAIN GATE TRAFFIC WILL AFFECT SR 30

TRAFFIC COUNT FROM POINT 500 FEET WEST OF HURLBERT MAIN GATE ENTRANCE
INFORMATION COLLECTED BY FL DOT AT MILEPOST 5.757

2002						2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	WEST DHV	EAST DHV	DHV	EAST DHV	WEST DHV
A	B	C	D	E	F	G	H	I	J	K	L	M	N
			A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
44000	9.67	59.09	4255	2514	1741	51000	1.99%	5389	3184	2205	5946	3514	2433

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION,

NEW HOUSING - NEW TRIPS GENERATED east west

302													
193	114	79							79	114		79	114
109	64	45							45	64		45	64

ASSUMPTIONS ABOUT THIS ALTERNATIVE
Assume 315 new trips at peak hour
Assumed 5% tourists for this costal road in a resort area
Assumed 2% truck traffic

DEMOLISHED HOUSING - OLD TRIPS LOST
ASSUME NONE

SUB TOTAL ADD									124	178		124	178
SUB TOTAL SUBTRACT									0	0		0	0
									BUILD 2014			BUILD 2019	
DESIGN PEAK HOUR									3,308	2,383		3,637	2,611

EXHIBIT C

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	1/20/05
Analysis Period:	2019 - NO Build
Highway:	SR 30
From/To:	near Hurlbert Field Main Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3184	vph	2205	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	884		613	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	1880	pcphpl	1302	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1880	pcphpl	1302	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S	46.1	mph	48.8	mph
Level of service, LOS	E		D	
Density, D	40.8	pc/mi/ln	26.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/8/2004
Analysis Period:	2019 - NO Build
Highway:	SR 30
From/To:	near Hurlbert Field Main Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3514	vph	2433	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	976		676	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	2075	pcphpl	1437	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	2075	pcphpl	1437	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S		mph	48.7	mph
Level of service, LOS	F		D	
Density, D		pc/mi/ln	29.5	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/5/2004
Analysis Period:	2014 - Build
Highway:	SR 30
From/To:	near Hurlbert Field Main Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3308	vph	2383	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	919		662	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	1953	pcphpl	1407	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1953	pcphpl	1407	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S	45.6	mph	48.7	mph
Level of service, LOS	E		D	
Density, D	42.8	pc/mi/ln	28.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	4/5/2004
Analysis Period:	2019 - Build
Highway:	SR 30
From/To:	near Hurlbert Field Main Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3637	vph	2611	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1010		725	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	2148	pcphpl	1542	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	2148	pcphpl	1542	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S		mph	48.2	mph
Level of service, LOS	F		D	
Density, D		pc/mi/ln	32.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

TRAFFIC ANALYSES OF HURLBERT GATES
ALL Alternatives
ASSUME 315 NEW TRIPS AT PEAK HOUR.
HURLBERT EAST GATE TRAFFIC WILL AFFECT MARTIN L. KING BLVD.

TRAFFIC COUNT ON MARTIN L. KING BLVD 500 FEET SOUTHWEST OF HURLBERT FIELD ROAD
INFORMATION COLLECTED BY FL DOT AT MILEPOST 2.743

2002						2010	% GROWTH	2014	NO BUILD 2014		2019	NO BUILD 2019	
AADT	*K30	*D30	DHV=	HS DHV	LS DHV	AADT	PER YEAR	DHV	WEST DHV	EAST DHV	DHV	EAST DHV	WEST DHV
A	B	C	D	E	F	G	H	I	J	K	L	M	N
			A*B	D*C	D-E		((G-A)/A)/7	D*(1+H)^12			D*(1+H)^17		
27000	10.22	52.24	2759	**1442**	**1318**	41000	6.48%	5863	**3063**	**2800**	8026	**4193**	**3833**

AADT IS ANNUAL AVERAGE DAILY TRAFFIC
K30 IS THE FACTOR USED TO OBTAIN THE DHV (DESIGN HOURLY VOLUME) FROM AADT
D30 IS THE "SPLIT" BETWEEN THE DIRECTIONS OF TRAFFIC
HS DHV IS TRAFFIC GOING IN HIGHER DIRECTION OF ROADWAY - FOR PM RUSH ASSUME OUT OF CITY CENTER DIRECTION,

NEW HOUSING - NEW TRIPS GENERATED

	east	west				
302						
193	101	92		92	101	92	101
109	57	52		52	57	52	57

ASSUMPTIONS ABOUT THIS ALTERNATIVE
Assume 315 new trips at peak hour

SUB TOTAL ADD	**144**	**158**		**144**	**158**
SUB TOTAL SUBTRACT	**0**	**0**		**0**	**0**
	BUILD 2014			**BUILD 2019**	
DESIGN PEAK HOUR	**3,207**	**2,958**		**4,337**	**3,991**

DEMOLISHED HOUSING - OLD TRIPS LOST
ASSUME NONE

EXHIBIT C

EXHIBIT C

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/8/2004
Analysis Period:	2014 - NO Build
Highway:	MLK BLVD
From/To:	near Hurlbert Field EAST Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3063	vph	2800	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	851		778	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	1809	pcphpl	1653	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1809	pcphpl	1653	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S	46.6	mph	47.6	mph
Level of service, LOS	E		D	
Density, D	38.8	pc/mi/ln	34.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/8/2004
Analysis Period:	2019 - NO Build
Highway:	MLK BLVD
From/To:	near Hurlbert Field EAST Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	4193	vph	3833	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1165		1065	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	2476	pcphpl	2263	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	2476	pcphpl	2263	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S		mph		mph
Level of service, LOS	F		F	
Density, D		pc/mi/ln		pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

Michael J Smith
SAIC
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St. Ann MO 63074

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E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
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Date:	11/8/2004
Analysis Period:	2014 - Build
Highway:	MLK BLVD
From/To:	near Hurlbert Field EAST Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	3207	vph	2958	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	891		822	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	1894	pcphpl	1747	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	1894	pcphpl	1747	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S	46.0	mph	47.0	mph
Level of service, LOS	E		E	
Density, D	41.1	pc/mi/ln	37.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

EXHIBIT C

HCS2000: Multilane Highways Release 4.1d

Michael J Smith
SAIC
5000 Northwest Plaza, Suite 1000
St. Ann MO 63074

Phone: 314-770-3022 Fax:
E-mail: smmic@saic.com

OPERATIONAL ANALYSIS

Analyst:	Michael J. Smith
Agency/Co:	SAIC
Date:	11/8/2004
Analysis Period:	2019 - Build
Highway:	MLK BLVD
From/To:	near Hurlbert Field EAST Gate
Jurisdiction:	Fl DOT and Okaloosa County
Analysis Year:	2004
Project ID:	Eglin / Hurlbert Housing EIS

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	5		5	
Median type	Divided		Divided	
Free-flow speed:	Base		Base	
FFS or BFFS	50.0	mph	50.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	1.3	mph	1.3	mph
Free-flow speed	48.8	mph	48.8	mph

VOLUME

Direction	1		2	
Volume, V	4337	vph	3991	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1205		1109	
Trucks and buses	2	%	2	%
Recreational vehicles	0	%	0	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	0.95		0.95	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.990		0.990	
Flow rate, vp	2561	pcphpl	2357	pcphpl

RESULTS

EXHIBIT C

Direction	1		2	
Flow rate, vp	2561	pcphpl	2357	pcphpl
Free-flow speed, FFS	48.8	mph	48.8	mph
Avg. passenger-car travel speed, S		mph		mph
Level of service, LOS	F		F	
Density, D		pc/mi/ln		pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.